GLOBAL NEWS
Mystery Cavities Found in Great Pyramid

REVIEWS
Books, Films, Music

SCIENCE
Is the Universe a Quantum Algorithm?

NEXUS

THE ALTERNATIVE NEWS MAGAZINE

December 2016 – January 2017
Vol. 24, No.1
Australia $8.95
NZ $8.95

Establishment Media in Death Spiral

* Top 25 Censored stories
* Propaganda and the Press

Psychiatry: misdiagnoses and dangerous drugs

Fractal dimensions in nature and art

Digital Consciousness: prime mover of reality?

WikiLeaked White House emails reveal UFO disclosure being urged

ISSN 1039-0170
12>

Fully portable compact

The NEW Elanra AIR

Travel with confidence.
Get your Elanra Air today!

Special promotion for NEXUS readers.
Order now and get one needle replacement pack to last up to 15 months.

Breathe Better, Sleep Better, Be Better

MK II
PERFECT FOR AT HOME

MK III
GREAT FOR IN THE CAR, CARAVAN & CAMPING

ELANRA AIR PENDANT
DESIGNED FOR TRAVELLING AND DAY USE

Benefits include

- Increased vitamin absorbtion
- Comfortable breathing
- Increased work productivity
- Removal of airborne bacteria
- Improved concentration
- Assists in recovery from illness
- Assists jet lag and travelling
- Improved sleep, relaxation & meditation
- Assists with allergy & eczema sufferers

What the experts are saying ...

No other ioniser in the world can generate a constant reliable stream of small negative ions of oxygen, across variable frequencies whose output can be programmed in different modes for individual health requirements.

Other ionisers produce only large negative ions, which clean the air but cannot be breathed in, to exert a biological effect. How do we know? Simple. We globally patented our science and technology and are included on the *Australian Register of Therapeutic Goods Association* as a medical device.

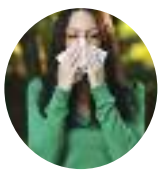
If it's not an Elanra Medical, it's just an air cleaner!
www.elanra.com

Your health is your wealth ...

87% of Elanra customers report faster recovery from illness in hospital when using their Elanra Ioniser. The Elanra Medical Ioniser is approved for use in hospitals (including intensive care) and complies with all safety and electrical standards

Now with the launch of the pendant it makes it more portable so you or a loved one can wear it to eliminate air-borne bacteria. The Elanra Air is also designed for travellers in order to help counteract some of the unpleasant consequences of travel to help your body regain its natural balance.

Elanra ionisers are therapeutic devices recognised around the World for a range of physiological improvements in health and wellness.



CALL NOW! ORDER YOUR ELANRA AIR TODAY!
Free call 1800 074 844 or visit www.elanra.com

ELANRA MEDICAL®

AUSTRALIAN MADE

EMF protection now available from NEXUS Magazine

"Blushield products are what I have been using at home and in the Nexus office. For the first time I have found something that actually works. Now I'm telling everyone." — Duncan Roads, NEXUS Magazine

Tesla Gold Portable

Great for teenagers and adults, the Tesla Gold Portable covers a three metre area in all directions (six metre diameter). On/Off switch included.
Size: 97mm x 57mm x 18mm

Tesla Gold Plug-in

Recommended for homes with low to high electromagnetic fields, this unit covers 45 metres in all directions (90 metre diameter).

Tesla Gold Cube

Suitable for homes with very high EMF; homes within sight of a mobile phone antenna; homes with smart meters; high-rise apartments; all workplaces; schools and hospitals. Covers 90 metres in all directions (180m diameter).
Size: 100mm x 100mm x 100mm

Tesla Gold Mini

For children and those who are electrically hypersensitive, this unit covers 1.5 metres in all directions (3 metre diameter). Dimensions: 85mm x 48mm x 13mm. No on/off switch.

Order from www.NexusMagazine.com

Advertise in the digital issue of NEXUS Magazine

Reach a global audience from as little as AUD$95.
Sizes available from display ad to full page.

Ads accepted in jpg or pdf format.

See ads schedule at the back of the magazine or www.nexusmagazine.com/advertise/ad-ratesdetails.
To book your ad, email editor@nexusmagazine.com

Subscribe to the digital version of

NEXUS Magazine

AUD$20 (+$2 GST in Australia)

- six issues per year
- log in and read online or download
- access does not expire

NEXUS MAGAZINE
Online Subscription
NEXUS Volume 23, no. 6, October - November 2016
NEXUS Volume 23, no. 5, August - September 2016

www.nexusmagazine.com/subscription

Volume 24, Number 1
December 2016 – January 2017

NEXUS
THE ALTERNATIVE NEWS MAGAZINE

Australasia & SE Asia Edition
www.nexusmagazine.com

CONTENTS

LETTERS TO THE EDITOR 4

GLOBAL NEWS 6
We report on plants that channel light to their roots, the oldest known Aboriginal settlement in arid Australia, flaws in fossil analysis, mysterious cavities within the Great Pyramid, smart security cameras and facial recognition, CDC scientists' corruption concerns, a staged Sky News program on Syria, and more.

PROJECT CENSORED 13
By Professor Mickey Huff and Project Censored. Students and academics, continuing an initiative that began in 1976 at Sonoma State University, California, have compiled the top 25 news stories of 2015–16 that were most ignored by the US corporate media.

PR, PROPAGANDA AND THE PRESS 25
By Leon Horton. Public relations hasn't merely leaked into the news, it's *saturated* it. As media corporations cut costs and sack more staff, the PR industry and wire agencies have filled the information-gathering void while overworked reporters are forced into churnalism.

DEADLY PSYCHIATRY 31
By Professor Peter C. Gøtzsche. As this book extract shows, the diagnosis of mental disorders is based on dubious psychiatric criteria, and treatment tends to require at least one dangerous drug from Big Pharma.

THE MANDELBROT SET 40
By Nigel Lesmoir-Gordon. Fractal patterns are found in nature and in art, but it wasn't until Professor Benoît Mandelbrot discovered his now iconic fractal set in 1980 that infinite nature was revealed in all its glory. Maths and geometry were back in the public mind.

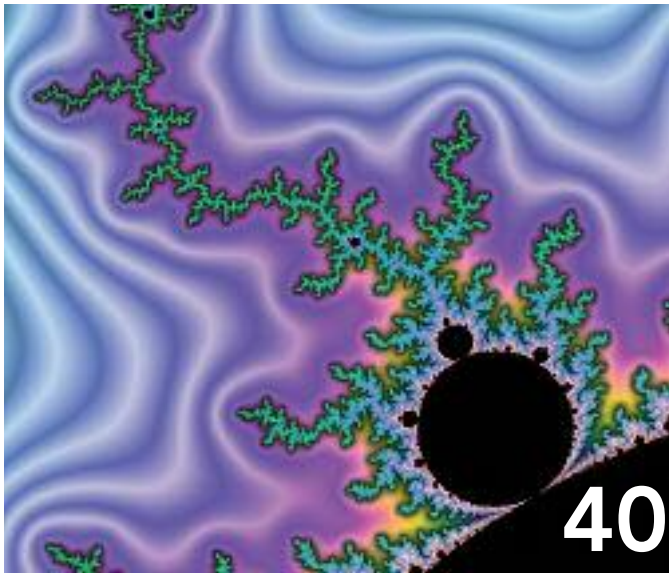


Image: Nigel Lesmoir-Gordon

SCIENCE NEWS: QUANTUM CODE 49
By Ovidiu Racorean. A recent quantum computing simulation points to the existence of a bizarre quantum code beneath stock market transactions. Could this code be a tiny fragment of a quantum code that our universe uses to create physical reality?

DIGITAL CONSCIOUSNESS 55
By Jim Elvidge. Evidence is mounting that we live in a consciousness-driven digital reality. This model may explain scientific anomalies as well as paranormal phenomena and has enormous implications.

STRANGE TIMES 63
Linda Moulton Howe discusses the WikiLeaked John Podesta UFO emails, and interviews Grant Cameron of PresidentialUFO.com on ET agendas and high-ranking, secret groups working towards disclosure.

REVIEWS: BOOKS, FILM, MUSIC 69
INTERNET & MAIL ORDER 89
SUBSCRIPTIONS 96

Cover graphics: Gerd Altmann, MasterTux

WARRANTY AND INDEMNITY
Advertisers upon and by lodging material with the Publisher for publication or authorising or approving of the publication of any material INDEMNIFY the Publisher and its servants and agents against all liability claims or proceedings whatsoever arising from the publication and without limiting the generality of the foregoing to indemnify each of them in relation to defamation, slander of title, breach of copyright, infringement of trademarks or names of publication titles, unfair competition or trade practices, royalties or violation of rights or privacy AND WARRANT that the material complies with all relevant laws and regulations and that its publication will not give rise to any rights against or liabilities in the Publisher, its servants or agents and in particular that nothing therein is capable of being misleading or deceptive or otherwise in breach of the Part V of the Trade Practices Act 1974. All expressions of opinion are published on the basis that they are not to be regarded as expressing the opinion of the Publisher or its servants or agents. Editorial advice is not specific and readers are advised to seek professional help for individual problems. The publisher reserves the right to refuse any advertising material for any reason.
© NEXUS New Times 1987–2016

NEXUS MAGAZINE
Published by
Nexus Magazine Pty Ltd
ABN 80 003 611 434

EDITOR
Duncan M. Roads
Email: editor@nexusmagazine.com

MANAGING EDITOR
Jenny Hawke

ASSISTANT EDITOR
SUBEDITOR
Ruth Parnell

DESIGNER
PRODUCTION MANAGER
Lee Brogan

NEWSFEED MANAGER
Steven Bartlett

NEWSFEED EDITOR
Lynelle Roads

OFFICE ADMINISTRATORS
Susie Foster
Richard Giles

CONTRIBUTORS THIS ISSUE
Professor Mickey Huff and Project Censored; Leon Horton; Professor Peter C. Gøtzsche; Nigel Lesmoir-Gordon; Ovidiu Racorean; Jim Elvidge; Linda Moulton-Howe

CARTOONS
Phil Somerville
http://www.somervillecartoons.com

PRINTING
Fairfax Media, Qld, Australia

HEAD OFFICE – All Correspondence
PO Box 307, Maleny, Qld 4552
AUSTRALIA
Tel: +61 (0)7 5442 9280
Website: www.nexusmagazine.com

NZ OFFICE – 88C Hansen Rd
RD 1, Kerikeri 0294
NEW ZEALAND
Tel: +64 (0)9 4051963

STATEMENT OF PURPOSE
NEXUS recognises that humanity is undergoing a massive transformation. With this in mind, NEXUS seeks to provide 'hard-to-get' information so as to assist people through these changes. NEXUS is not linked to any religious, philosophical or political ideology or organisation.

PERMISSION-TO-REPRODUCE POLICY
While reproduction and dissemination of the information in NEXUS is actively encouraged, anyone caught making a buck out of it, without our express permission, will be in trouble when we catch them!

Back in the USA...

At the time of my writing this, it's been four days since the people of the USA voted in Donald Trump for President, and the world is still holding its breath while it waits to see what the seemingly unpredictable President-elect will do next. Will he change things at a real level, or will he just rearrange the deckchairs as the ship sinks?

Stepping back from the politics itself, we clearly see that the people of the West are rejecting the establishment and, in particular, the establishment media. The entire Western media took a strong stance against Trump, while overlooking the new Hillary Clinton email scandals. This ensured that almost every anti-establishment person out there would vote for Trump.

We see it here in Australia with our anti-establishment protest vote going to anyone whom both the political parties and the media hate. We saw it in the UK with Brexit, and we are now seeing it in Europe.

The balance has tipped. The numbers of those who don't believe in the establishment are now greater than those who do. As a result, the mainstream media are now in a death spiral with no way out.

...the reality is that more and more people simply don't trust what the establishment tells them, or don't even listen to it in the first place.

Cost-cutting is constantly being applied to research and journalism, rather than to executives, and the already biased propaganda from before is now being topped up with rewritten press releases, advertisements dressed up as "news", and clickbait (all heading, no story).

Some say that this is a victory for alternative media over establishment media, but the reality is that more and more people simply don't trust what the establishment tells them, or don't even listen to it in the first place. Instead, they play games, socialise and watch TV shows and movies on demand.

So what to do? How does one stay informed without spending hours on alternative news websites with religious, financial or political agendas?

As I mentioned last issue, we've incorporated the former Alternative News Project (ANP) into NEXUS Magazine and renamed it NEXUSNewsfeed. More importantly, we've made it *free* to access and use. You can even access it anonymously. That's right: a free, 24/7 digital newsfeed, viewable on your computer, laptop or devices via a free app. No party politics, no sport, no gossip, no clickbait—just curated news, articles, events, reviews and more on every topic covered by NEXUS. We even offer a free daily email of 15 news items. Please spread the word: visit the website www.NexusNewsfeed.com.

I'd also like to welcome back our readers in the USA and Canada. After several years away, we're finally back in shops across America and Canada.

For the new readers among you, I'd like to point out that the NEXUS focus is a "cause", not a corporation. As such, we welcome any support via subscribing, advertising, asking for NEXUS in your local store, or telling your friends, fans and followers about the NEXUSNewsfeed.

In closing, I'd like to take this opportunity to thank all of our readers for your decades of support for NEXUS and our projects. On behalf of everyone at NEXUS, we wish you all a great festive season and a happy new year!

– Duncan

NEXUS Newsfeed.com

NexusNewsfeed.com is a free alternative news and information service. Formerly known as the Alternative News Project, we now offer access all areas.

Filter your news by topic or sign up to save preferences from the 12 Categories, 72 Sub-Categories and hundreds of Topics available.

New features include Events and Channels which provide additional content from some of your favourite alternative news providers.

Access All Areas

Free content 24/7 customised to your interests

- accessible via browser and app
- fully searchable content that never expires
- filter selected topics with one click/tap
- the option of a daily headlines email
- local, regional and global content

www.NexusNewsfeed.com

LETTERS

TB, Alzheimer's and Cancer

Dear Editor: The article titled "The Bacterial Cause of Alzheimer's Disease" from the October–November 2016 [23/06] magazine caught my attention. I remember another article about the cause of cancer published two or three years ago (I'm sorry, I can't find the title of it) that had the same conclusion: *M. tuberculosis* is behind both groups of illness. And data manipulation to cover the truth is there as well.

From time to time, some statistical forecast about what the cancer rates will look like in the next five, 15 or 20 years comes my way. It predicts that nearly every third or second human will get some form of it.

I'm wondering how these scientists know this will happen on such a large scale, despite the fact that nearly every developed country feeds cancer as well as Alzheimer's research by billions every year—add the currency of your choice.

It looks like they know that a time bomb is silently ticking away in everybody; it doesn't matter what conditions we live in. This is just a question of time and the condition of the body when this bomb explodes.

While I was reading this article about Alzheimer's disease, something clicked in my head. The last piece of the jigsaw puzzle fell on the right place. The mutated *Mycobacterium tuberculosis* causes cancer. It is also responsible for Alzheimer's disease and probably for other health problems that we just haven't realised yet.

Both groups of diseases spread on an almost pandemic scale. In my opinion, it points to the only source: compulsory vaccination against tuberculosis. It is one of the "most successful vaccination schemes". Every child had to have this jab at least three times, or sometimes even more if the body's reaction was not present or was showing very little signs of a fight between the "dormant" bacillus from the vaccine and the immune system.

The future doesn't look rosy, but on the other hand we know quite a large variety of antibacterial treatments. I hope this helps.

Ludmila D., Bristol, UK

Homeopathics vs Placebos

Dear Duncan: I am responding to your placebos article [23/06]. Since homeopathy is often tarred with the placebo brush, I thought I would list some of the ways that homeopathic remedies differ from placebos.

A healthy person taking multiple doses of a remedy, unknown to them, over a few days will temporarily experience new symptoms. These are mental, emotional and physical symptoms that they have never had before and are unique to and consistent with the remedy being taken. This is called a *homeopathic proving*.

Two hundred years ago, Dr Samuel Hahnemann did a proving of belladonna which elucidated the unique symptoms caused by that remedy. One hundred years later, another proving was conducted where none of the provers or supervisors all over the world knew what was being taken. They developed the same unique constellation of symptoms.

Anyone sceptical of the power of extremely diluted homeopathic remedies can do the same homeopathic proving process and experience it for themselves.

A curative homeopathic remedy will cause a temporary worsening of symptoms in a sick person if the dose is too strong, before the cure begins.

For over 200 years, homeopathic remedies have been clinically documented to cure chronic disease beyond the dosing period.

Homeopathy works equally well

with plants, animals, babies and adults in a coma, which should also indicate that it is not placebo.

A placebo will usually only have some temporary benefit to a sick person and normally no effect on a healthy person who hasn't been primed to have some response.

Dr Jacques Benveniste, Nobel Laureate Dr Luc Montagnier and the many laboratories that duplicated Benveniste's results have demonstrated that homeopathic remedies carry an electromagnetic signal. A placebo sugar pill or water does not.

Roger Barr, Puebla, Mexico, roger@canhealyourself.com

South Africa 'Student' Riots

Dear NEXUS: I am a Zimbabwean student currently attending the University of Pretoria in South Africa. My university, along with most other universities in the country, has been "shut down" as a result of student strikes for "free education" which was promised by the government in 2010.

However, I am under the impression that there is more to these strikes than "free education", and I'm wondering if the NEXUS team would be able to shed some light on these happenings.

Most of the time, the protesters are not even students themselves; they are members of nearby townships who have been bussed in to cause commotion. They cannot produce student cards and are not found on the university databases. Furthermore, most of the people in these protests cannot tell reporters or fellow students what they are protesting for, just that "this

university must be shut down".

To make things worse, if these students truly wanted "free education", then the universities are not the places to riot; they do not set the fees: the government does. Why are they trashing, vandalising and tormenting universities and disrupting our end-of-year exams? We work a January to December year, and most students sit for final exams during November, so it actually appears that these protesters are trying to prevent students from attaining degrees.

What is interesting is that the only university in the *entire* country which has not been closed and has gone on with its semester as normal is Stellenbosch University.

Now, the Stellenbosch students are more than capable of causing a ruckus, as they did this last year during the "Afrikaans Must Fall" campaign against the Afrikaans medium of instruction. So why do they feel that this is not a worthy cause to fight for? Or have they been told not to?

What is more, at the beginning of our semester, lecturers made comments like "We need to hurry up and finish our syllabus this semester because we are expecting a week of strikes". How did they know this in July, yet these strikes only started in mid-September?

These questions plague a lot of students in South Africa as we desperately try to finish our university semester. We wonder if there really is more to these strikes, or if they are a vain attempt at achieving "free education" in an economy where nine per cent of the population pays tax.

A. S., Harare, Zimbabwe

The Companion NEXUS

Dear Duncan: The NEXUS Newsfeed is an impressive result of *all* your work.

So many wrongs are done in the world, so much good is in the world, so much beauty, mystery, you name it, and you seem to have covered so much of it all.

I have in the latter years saved NEXUS for our overseas holidays when gardening is neglected in favour of beach lounges, diving and enjoying the many delicacies on offer. It is especially there, under a warm tropical sun (instead of when I'm chopping firewood to keep warm during winter), that NEXUS is the vehicle that takes me away to the great unknown or educates me to a better understanding of what makes our world "tick".

For over 30 years NEXUS has been my companion, which is nearly as long as my wife has been, and at 82 years of age I hope to enjoy many more issues of NEXUS and the new NEXUS Newsfeed.

Thank you, Duncan.

Helen and Flemming, Australia

The Sacred Number 432

Dear Duncan: The 432 Hz (cycles per second) frequency as a new concert pitch [23/06] is certainly in harmony with a sacred past as it is connected to many aspects of our existence. Its ultimate origin lies in the mystical number 666, for 432 is twice 666. How can this be?

Well, 666 is actually an algebraic grouping which means 6.6.6 or 6 x 6 x 6 = 216, and 216 x 2 = 432. For instance, in school algebra, *abc* means "a x b x c". The *number string* 432 pops up all over the place in various scales and lengths.

Of crucial interest is that 4,320 years is exactly 1/6th (6 is also key) of the zodiac's precessional cycle of 25,920 years. The frequency 432 Hz x 60 = 25,920 cycles per minute, a restatement of the zodiac. If the number of 360 degrees in a circle or the number of days, 360, in the ancient year (they knew the real length) is restated as 360 feet, this is 4,320 inches; 432 inches = 36 feet (6^2) = 12 yards. If all numbers from 1 to 36 are added, we get 6.6.6 = 216 (another key number) or 432/2.

The wavelength of 432 Hz is calculated by dividing the speed of light in miles per second by 432 Hz, resulting in a wavelength of 432 miles (to an accuracy of 0.18%), which is astonishing. And 432 feet = 5,184 inches, which relates to twice the precessional cycle in years (25,920 x 2 = 51,840). The numbers 5,184 and 51,840 are the same number string but on a different scale. Also, 432 yards = 1,296 feet, which relates to 12,960 years, half the precessional cycle. In addition, 43,200 years (21,600 x 2) is the *estimated* time for the Earth to move from maximum to minimum tilt, and vice versa.

The speed of sound in air is 736.3636 miles per hour at 32 °F, or 12,960 inches per second (that's 4,320 x 3). An audio frequency of 432 Hz therefore has a wavelength of 12,960 inches per second / 432 Hz = 30 inches (60/2).

The velocity of sound in granite is 8,836.38 miles per hour, which converts to 4,320 yards per second, or 25,920 yards per minute. Granite was the preferred material for the ancient megaliths.

Other calculations of note that involve number strings include:

$3^3 + 4^3 + 5^3 + 6^3 = 432$

$1^1 \times 2^2 \times 3^3 = 108$ (432/4)

$3^3 + 4^3 + 5^3 = 216$ (432/2)

$1^3 \times 2^3 \times 3^3 = 216$ (432/2)

$(3 + 4 + 5)^3 = 1{,}728$ (432 x 4)
(Note that and there are 1,728 cubic inches in one cubic foot.)

$2^3 \times 3^3 \times 4^3 \times 5^3 = 1{,}728{,}000$

$2^2 + 3^2 + 4^2 + 5^2 = 54$ (432/8)

$3^2 \times 4^2 \times 5^2 \times 6^2 = 129{,}600$
(43,200 x 3)

$1^4 \times 2^4 \times 3^4 = 1{,}296$

$3^4 \times 4^4 \times 5^4 = 12{,}960{,}000$

$2^2 \times 3^2 \times 4^2 \times 5^2 \times 6^2 = 518{,}400$
(43,200 x 12)

The measurement numbers (in feet, inches, etc.) are not available in the metric system, and also confirm the imperial measures as part of the sacred design.

Space does not permit further examples, but they are covered in my book *How We Were Made* (ISBN 978-0-9545957-3-9).

With best wishes,

William Neil, Reading, England

Global News from NEXUS Newsfeed

PLANTS 'SEE' UNDERGROUND BY CHANNELLING LIGHT TO THEIR ROOTS

Plants seem to pipe sunlight directly down into underground roots to help them grow.

Light receptors in stems, leaves and flowers have long been known to regulate plant growth. Roots also have these receptors, but it has been unclear how they sense light deep in dark soil.

Dr Hyo-Jun Lee, from the Department of Chemistry at Seoul National University, South Korea, and his colleagues used *Arabidopsis thaliana*—a small flowering plant from the mustard family—as a model to study this phenomenon.

They found that the plant stem acts like a fibre-optic cable, conducting light down to so-called phytochrome receptors in the roots. These trigger the production of a protein called HY5, which promotes healthy root growth.

When the plants were engineered to have phytochrome mutations, HY5 production declined. And when they had HY5 mutations, their roots became stunted and strangely angled.

(Source: NewScientist.com, 1 November 2016, http://tinyurl.com/j2c8u7d)

SCIENTISTS USE SPINACH TO DETECT CHEMICALS, SEND ALERTS TO SMARTPHONES

Researchers have successfully used a plant as a bomb detector which relays warnings to humans via their smartphones.

A team of scientists from the Massachusetts Institute of Technology (MIT) embedded carbon nanotubes in the plant's leaves which emitted a signal when they detected nitroaromatics—chemical compounds used in landmines and other explosives.

Through these nanotubes, which are one ten-thousandth the diameter of a human hair, the plant can detect the chemicals through the air and groundwater.

The researchers also applied a solution of nanoparticles to the underside of the leaves and placed sensors into a leaf layer (known as the mesophyll) where most photosynthesis takes place.

To read the signals the plant gives off, researchers shine a laser on the leaves which prompts the carbon nanotubes to emit a near-infrared fluorescent light.

That light is picked up by using an infrared camera connected to a Raspberry Pi, a credit-card-sized computer similar to the computer used in a smartphone.

The Raspberry Pi then sends an email to the phone, alerting the owner to the presence and size of an explosive.

By engineering these plants to act as chemical sensors, scientists can perform monitoring tasks in public spaces and identify potential terrorism threats at mass-attended events, said Michael Strano, Professor of Chemical Engineering at MIT.

"They could also be used on the periphery of a chemical plant and even fracking sites," he said.

The researchers can pick up the warning signal from about one metre away, but are working to increase that distance.

As well as spinach, the researchers used rocket and watercress as chemical sensors, choosing to use commonly available plants.

"You can just walk up to any existing plant; it can be mature, and you just infuse this nanoparticle solution into the leaves and you have rendered it into a sophisticated chemical sensor," Professor Strano noted.

Using plants as sensors could see researchers detect environmental conditions like drought in the future.

"Plants are very environmentally responsive," Professor Strano said.

"They know there is going to be a drought long before we do.

"If we tap into those chemical signalling pathways, there is a wealth of information to access."

Professor Strano added that the research would continue to show how plants could be used in unconventional ways.

(Source: ABC.net.au, 1 November 2016, http://tinyurl.com/jx39l52)

www.NexusNewsfeed.com
24-hour live news feed
Apps for Apple & Android

OLDEST KNOWN EVIDENCE OF ABORIGINAL SETTLEMENT IN ARID AUSTRALIA FOUND

The chance discovery of a rock shelter in South Australia's Flinders Ranges has overturned our understanding of how Australia was colonised. The site, known as Warratyi, shows that Aboriginal Australians settled the arid interior of the country around 49,000 years ago—some 10,000 years earlier than previously thought.

The shelter, about 550 kilometres north of Adelaide, also contains the first reliably dated evidence of human interaction with megafauna.

Artefacts excavated at the site also push back the earliest-known dates on the development of key bone and stone axe technologies and the use of ochre in Australia.

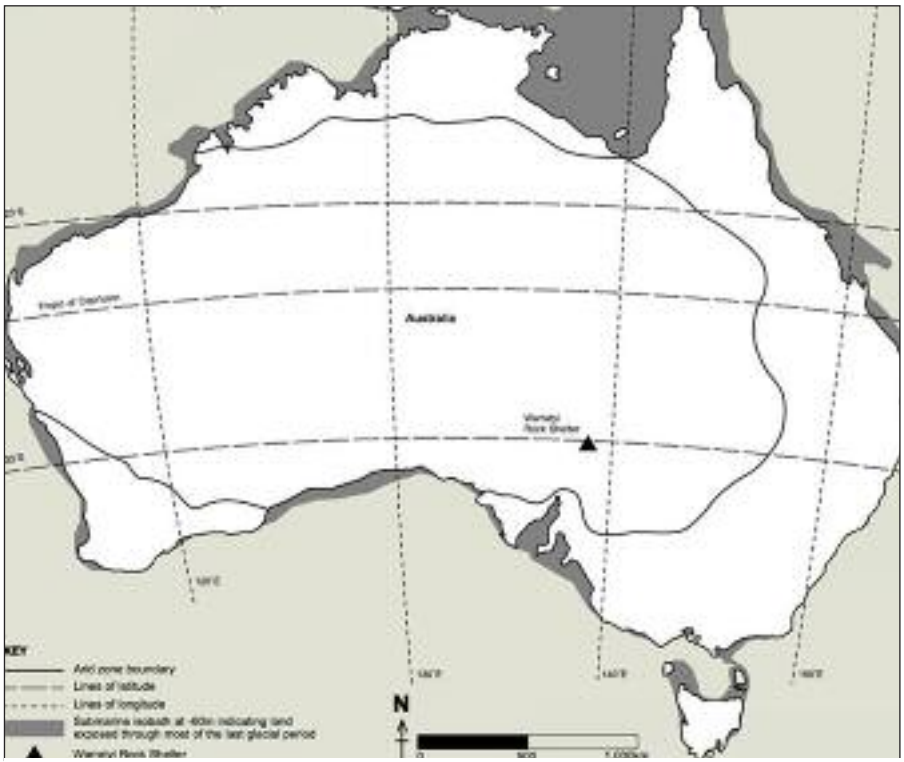
Lead author Giles Hamm, a consultant archaeologist and doctoral student at La Trobe University, found the site with local Adnyamathanha elder Clifford Coulthard while surveying gorges in the northern Flinders Ranges.

Mr Hamm said the significance of the site is the combination of its age and its geographic location. The previous oldest-known site in the arid zone, located at Puritjarra in western Central Australia, is around 38,000 years old.

"[This discovery] puts people moving south from the northern part of the continent to the southern interior a lot sooner than we thought. They got there before it became really arid," he said.

It is a view supported by palaeoanthropologist Dr Michael Westaway at Griffith University, who was part of a recent genomic study which confirmed that modern Aborigines are the descendants of the first people to inhabit Australia—people who adapted genetically to survive in the desert.

"Our DNA paper suggested the arid centre at 50,000 years ago was not really a barrier to the movement of people, and this seems to be what Giles is suggesting: people were able to migrate south quite quickly," Dr Westaway said.



Map showing the location of the Warratyi rock shelter

Among the other significant artefact finds at the site is the earliest-known use of ochre in Australia and Southeast Asia around 49,000–46,000 years ago.

Mr Hamm said they have pushed back the dates on the development of technologies such as bone needles (40,000–38,000 years ago), wood-handled stone tools (at least 24,000 years ago) and gypsum use (40,000–33,000 years ago).

The site also provided reliably dated evidence of hafted axe technology about 38,000 years ago.

Co-author Professor Gavin Prideaux pointed to the discovery of bones from the extinct giant wombat-like *Diprotodon optatum* and eggs from an ancient giant bird as important evidence of interaction with ancient humans which would have an impact on the debate over the extinction of megafauna.

Professor Prideaux, from Flinders University's School of Biological Sciences, said that the only previous site in Australia where megafauna remains and human artefacts have been found together is at Cuddie Springs in New South Wales—the subject of controversy over the accuracy of the dating.

"One good thing about this study…is there's no doubt there are megafauna remains in the form of *Diprotodon* and a giant bird in that rock shelter in a well-dated, well-stratified context some time between 45,000 and 50,000 years ago," Professor Prideaux said.

He added that the paper, published in *Nature* (2 November 2016), "smashed several paradigms about Indigenous Australians".

"People…were set up in arid southern Australia by about 50,000 years ago and they had all these amazing technologies much earlier than what we've thought," he said. *(Source: ABC.net.au, 3 November 2016, http://tinyurl.com/jlfg3a7)*

FLAWED ANALYSIS CASTS DOUBT ON YEARS OF EVOLUTION RESEARCH

Years of research on the evolution of ancient life, including the dinosaurs, have been questioned after a fatal flaw in the way fossil

data is analysed has been exposed by scientists from the universities of Reading and Bristol, UK.

The new research suggests that the history of Earth's biodiversity may have been more dynamic than believed, with bursts of new species appearing, along with crashes and more stable periods.

The new study, published on 24 October in *Methods in Ecology and Evolution*, by Dr Manabu Sakamoto and Dr Chris Venditti, from Reading, and Professor Michael Benton, from Bristol, says that a technique used to "correct" records of diversity in fossils is actually giving misleading results. It means that almost a decade's worth of work aimed at providing an insight into evolution may be misleading as it was based on this fundamental error.

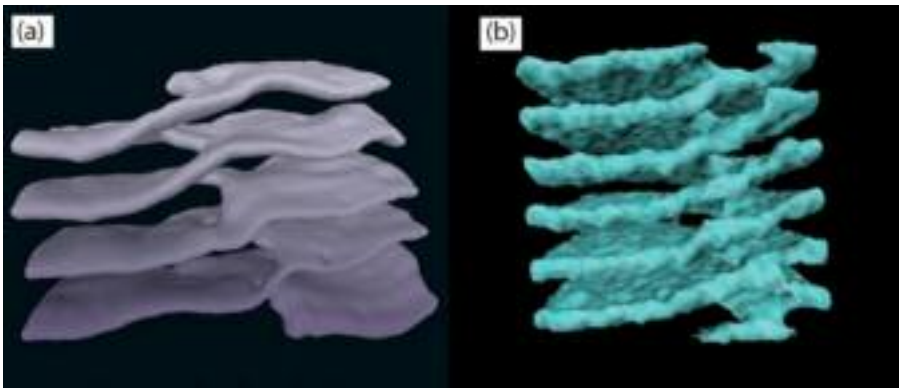
The method assumes that variations in the number of different fossils at any given time are a reflection of how much rock was available. It has been used in more than 150 published research papers since 2007 when it was first used.

Dr Sakamoto, an evolutionary biologist at Reading, said: "Our work calls into question nearly a decade's worth of scientific reports and interpretations on the way life on Earth has evolved."

The researchers ran thousands of simulations to test the data correction method, but found that it failed to return correct results in as much as 100 per cent of the simulated cases.
(Source: University of Bristol, press release, 24 October 2016, http://tinyurl.com/hq85t24)

A FRACTAL RELATIONSHIP BETWEEN NEUTRON STARS AND HUMAN CELLS?

Astrophysicists can only indirectly infer what's inside a collapsed supernova, or neutron star. But perhaps an analogous system is just a microscope away. Theorists simulating the structure of a neutron star's crust have identified features similar to those observed in cellular



Similar shapes, structures consisting of stacked sheets connected by helical ramps, have been found in cell cytoplasm (left) and neutron stars (right). (Source: University of California, Santa Barbara)

membranes. The finding suggests that although neutron stars and membranes differ by 14 orders of magnitude in their density, their structures may be determined by the same geometric constraints.

The outer layer of a neutron star is a dense blend of protons, neutrons and electrons in which long-range repulsive (Coulomb) forces compete with the shorter-range and attractive strong force. Simulations have shown that the balance of these forces causes matter to organise into dense regions separated by voids. These structures, termed "nuclear pasta" for their resemblance to shapes like lasagna and spaghetti, can influence a star's heat loss and magnetic field.

Professor Charles Horowitz of Indiana University, Bloomington, and colleagues previously predicted the lowest-energy "pasta phase" in dense nuclear matter using molecular dynamics simulations.

By chance, Dr Greg Huber, a biophysicist and an adjunct physics professor at the University of California, Santa Barbara, had come across an article about the structures and recognised that one of them has a striking resemblance to the membrane folds in endoplasmic reticulum, a part of the cell involved in protein folding and transport.

The researchers have now teamed up to study how this phase self-assembles out of uniformly distributed protons, neutrons and electrons. Their simulations show that the particles organise into high-density filaments and then expand into layers connected by pairs of ramp-like junctions—similar to the floors of a parking garage.

Having seen the same shapes in dense nuclear matter and biological membranes, the researchers speculate that the energies of both systems depend on their geometry in a simple, universal way.
(Source: Physics.aps.org, press release, 1 November 2016, http://tinyurl.com/zmhabyc)

'HUMAN RIGHTS CHAMPION' AUNG SAN SUU KYI IMPRISONS DISSIDENTS

Myanmar's de facto leader, Aung San Suu Kyi of the National League for Democracy (NDL) political party, has paved her time since coming to power earlier this year with both irony and hypocrisy. She has not

only illegally declared herself "leader" of the Southeast Asian state in contravention of its constitution, but she has also embarked on an iron-fisted purge of her political opponents that is identical to the one she fought against as she struggled to seize power to begin with.

Myanmar's constitution prevented Suu Kyi from holding the nation's highest office due to her inordinate amount of time spent overseas, her status of having been married to a foreigner, and her children's dual citizenship.

Instead of adhering to the law, her party, once in power, simply contrived an entirely new post for Suu Kyi: State Counsellor of Myanmar, which makes her the "de facto leader" of Myanmar.

Another myth built up around Nobel Peace Prize Laureate Suu Kyi by the West has been her advocacy for "human rights". However, this appears to extend out to protect only as far as her immediate political allies are concerned.

For groups beyond this self-serving political protection, and particularly regarding her political opponents, Suu Kyi and her NDL are just as eager to imprison, crush or kill political opponents as they claimed the ruling military government had been.

While violence targeting the nation's Rohingya population escalates, several online activists have been sent to prison for "insulting" the ruling government and Western-backed media fronts and organisations.

The West's champions of democracy, rule of law and human rights in Myanmar appear to have simply taken over right where Suu Kyi and her NDL party claimed the military-led government had left off.

Despite the overt nature of Suu Kyi's breaches of Western standards of "democracy" and "human rights", the US is on track to lift all sanctions from Myanmar as Suu Kyi and her government open the nation, its people and its resources to exploitation by Western corporations.

(Source: New Eastern Outlook, 28 October 2016, http://tinyurl.com/h2rfljm)

MYSTERIOUS CAVITIES DISCOVERED WITHIN THE GREAT PYRAMID OF GIZA

In late October 2015, a new project employing various high-tech methods to study four of Egypt's largest pyramids began searching for hidden chambers and clues to the methods of construction used to build the monuments.

At a news conference on 9 November 2015, the Ministry of Antiquities announced: "Two weeks of new thermal scanning in Egypt's Giza pyramids have identified anomalies in the 4,500-year-old burial structures, including a major one in the largest pyramid."

Egypt's then Minister of Antiquities, Dr Mamdouh el-Damaty, and technical experts working on the project showed the higher temperature being detected in three specific adjacent stones at the bottom of the pyramid in a live thermal camera presentation to journalists.

The scanning showed "a particularly impressive one [anomaly] located on the Eastern side of the Khufu pyramid at ground level," the Ministry said in a 9 November 2015 statement.

Dr el-Damaty said that while researchers were inspecting the area, they found "something like a small passage in the ground that you can see, leading up to the pyramids ground, reaching an area with a different temperature". He asked: "What will be behind it?"

A year on, and we finally have more news on the Great Pyramid investigation. Only, the much-vaunted "impressive anomaly" on the pyramid's eastern side doesn't get a mention; instead, new "cavities" have been found.

An unknown cavity was detected at a height of about 345 feet [105 metres] from the ground on the northeastern edge of the monument, while a "void" was found behind the northern side at the upper part of the entrance gate.

"Such void is shaped like a corridor and could go up inside the pyramid," said Mehdi Tayoubi, founder of the Paris-based Heritage Innovation Preservation Institute.

"The precise shape, size and exact position of this void is now under further investigation," the researchers commented.

(Source: DailyGrail.com, 10 November 2015, http://tinyurl.com/nc8cely, *25 October 2016, http://tinyurl.com/q3hcyma)*

SMART SECURITY CAMERAS WILL TELL IF YOU'RE TEXTING AND DRIVING

Imagine a security camera that can understand and analyse the scene it's capturing. The camera can spot someone who is leaving a piece of luggage behind at an airport and issue an alert. It can identify a car being sought in connection with a crime based on its colour, shape and dented left bumper bar, even if the licence plate has been covered up. And it can spot drivers who are texting when they should be watching the road, potentially passing on this information to law enforcement officials who can then issue a ticket.

These are some of the advanced security techniques being pushed by Movidius, a chip-maker specialising in artificial intelligence and computer vision. Its Myriad chip powered the spatial awareness of Google's early Project Tango devices and the sense-and-avoid features inside DJI's latest Phantom 4 drone. The company was recently acquired by Intel, and today [24 October] announced that its Myriad chip is being added to the devices of Hikvision, one of the world's largest sellers of Internet-connected security cameras.

Security cameras with this level of visual intelligence are both exciting and worrisome. Hikvision cites the case of a senior citizen who became lost and was located using the facial recognition system built into its cameras.

But a camera that can find a lost child or identify a criminal suspect can just as easily be used for invasive government surveillance, as in the case of protesters targeted through facial recognition that was reported earlier in October.
(Source: TheVerge.com, 24 October 2016, http://tinyurl.com/h65d387)

ONE IN TWO AMERICAN ADULTS ALREADY IN FACIAL RECOGNITION NETWORK

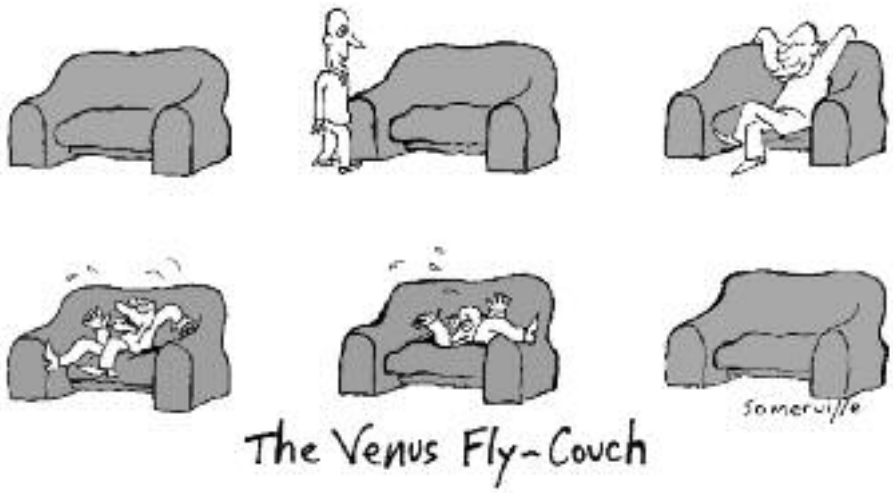
Half of all American adults are already in some sort of facial recognition network accessible to law enforcement, according to a comprehensive new study.

Conducted over a year and relying in part on Freedom of Information and public record requests to 106 law enforcement agencies, the study, conducted by Georgetown Law's Center on Privacy & Technology (CPT), found that American police use of facial recognition technology is a scattered, hodgepodge network of laws and regulations.

"Looking at the sum total of what we found, there have been no laws that comprehensively regulate face recognition technology, and there's really no case law either," Clare Garvie, an associate at the CPT, told Vocativ. "So we find ourselves having to rely on the agencies that are using that technology to rein it in. But what we found is that not every system—by a long shot—has a use policy."

That so many American adults are in at least one facial recognition database is largely due to the fact that at least 26 states share their Department of Motor Vehicles databases with the FBI, state police or other law enforcement agencies, the study found.

"These systems are used on law-abiding Americans without their knowledge or consent in most cases," Garvie said.
(Source: Vocativ.com, 18 October 2016, http://tinyurl.com/zcgcmvc)



THE BIGGEST MEDICAL WHISTLEBLOWER EVENT IN HISTORY?

CDC* whistleblower Dr William Thompson—the primary subject of the documentary *Vaxxed*—appears to have triggered a whistleblower avalanche following his explosive confession that he and his superiors destroyed hard evidence linking vaccines to autism.

A group of a dozen or more scientists identifying themselves as CDC Spider (Scientists Preserving Integrity, Diligence and Ethics in Research) recently sent a letter to the CDC's Chief of Staff, Carmen Villar, expressing their serious concerns that the corruption and complicity are not anomalies but have now become entrenched, systemic problems.

CDC Spider's letter of 29 August 2016 opens with this extremely revealing paragraph:

"We are a group of scientists at CDC that are very concerned about the current state of ethics at our agency. It appears that our mission is being influenced and shaped by outside parties and rogue interests. It seems that our mission and Congressional intent for our agency is being circumvented by some of our leaders. What concerns us most, is that it is becoming the norm and not the rare exception. Some senior management officials at CDC are clearly aware [of] and even condone these behaviors. Others see it and turn the other way. Some staff are intimidated and pressed to do things they know are not right. We have representatives from across the agency that witness this unacceptable behavior. It occurs at all levels and in all of our respective units… We are asking that you do your part to help clean up this house!"

* The Centers for Disease Control and Prevention (CDC) is the leading US national public health institution.

(Source: GlobalFreedomMovement.org, 23 October 2016, http://tinyurl.com/zrt7yds)

The Centers for Disease Control and Prevention's Roybal campus in Atlanta, Georgia. (Photo: Daniel Mayer)

ACTOR SAYS HE IMPERSONATED RUSSIAN MERCENARY IN SYRIA FOR SKY NEWS REPORT

A Russian actor claims that the recent Sky News documentary about undercover Russian mercenaries in Syria was staged.

In a recently aired Sky News investigation, the channel claimed that it had uncovered facts about Russian mercenaries in Syria who were operating undercover.

One of the key pieces of evidence provided was an interview conducted by the Sky News Moscow correspondent, John Sparks, who spoke to two men who allegedly had comprised part of a secret Russian force, called "Wagner", operating in Syria.

One of them, named Dmitry, said that some 500 to 600 people in the unit had died while serving in the country. The faces of the men were hidden and their voices changed "to protect their identities".

Following the report, Russian television channel NTV aired its own investigation, claiming to have found Dmitry, who apparently turned out to be a Russian actor living in Moscow.

RT.com also contacted a man whose real name is Aleksandr Agapov, who said that he played the role of a "Wagner" fighter at the request of Sky News.

"They said we have this information. You simply need to prepare yourself based on that information and make out you were in the military in Syria in [the] service of a private company," Agapov told RT.com.

In the interview, Agapov said he had been told that the clip would be part of a movie. However, after becoming suspicious, he decided to record a conversation with Sparks that supposedly took place in a Moscow hotel. The recording was initially passed to NTV.

RT.com went on to check this claim as well. Our channel forwarded the recording to an acoustic analysis laboratory in Moscow. Audio analyst Ivan Ursov said the outcome clearly pointed to one voice belonging to Aleksandr Agapov. He found with "85 per cent certainty" that the second voice is that of Sky News correspondent John Sparks.

It's not the first time that the media outlet has found itself in hot water over such a case. Recently, the outlet triggered outrage in Romania after suggesting there was a thriving illegal arms trade in the country. In that case, a Sky News reporter spoke to two masked men who were selling a number of weapons, including semi-assault rifles. According to Romanian officials, the outlet paid the men some £5,000 (US$6,600) for what they called a "faked report".

(Source: RT.com, 18 August 2016, http://tinyurl.com/hluvphu)

NEXUS
All back issues 1987-2016

Every piece of information contained in NEXUS Magazine since it was first published in 1987 is available in pdf format on this DVD.

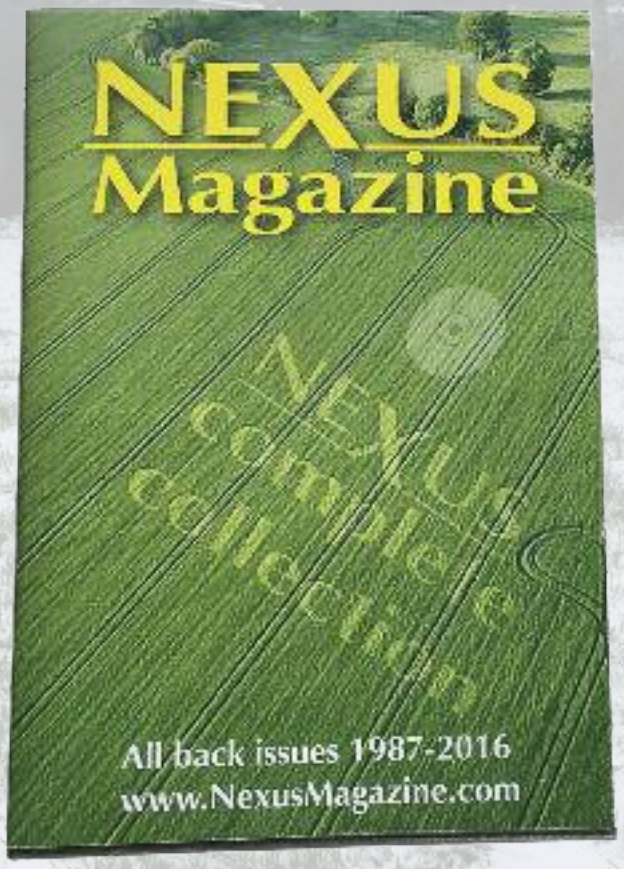
Search over 1400 articles including Global News, Twilight Zone and Science News, reviews and more, published in the 29 years from 1987 up to and including Volume 23, Number 6 (October-November 2016).

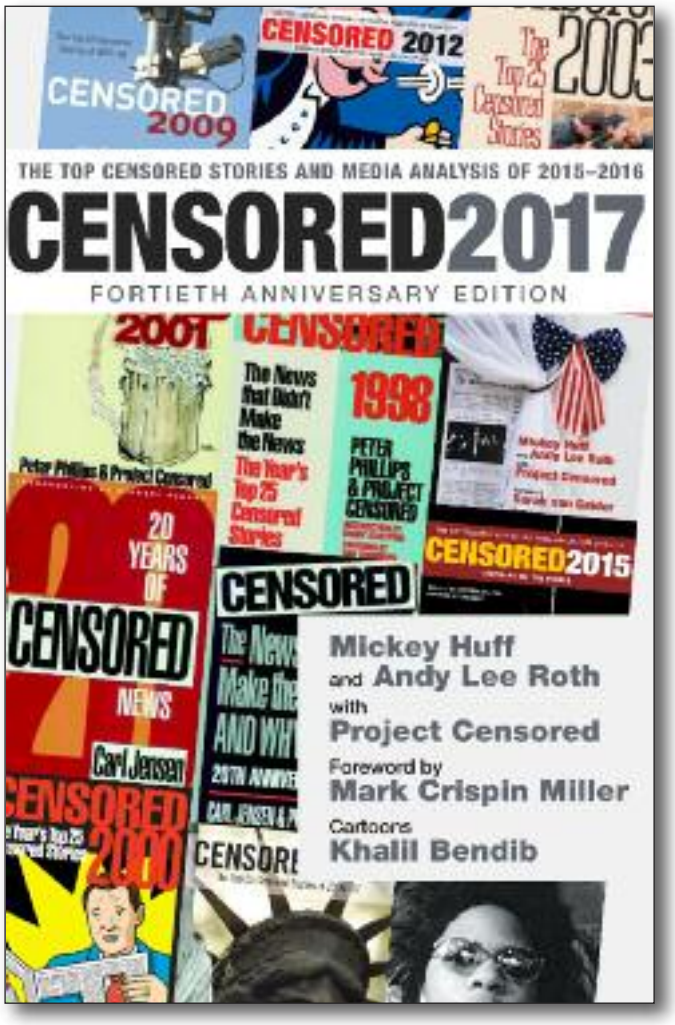
EVERY NEXUS ISSUE AND ARTICLE ON DISC

Order at
www.NexusMagazine.com

Cost is AUD$135.45 +p&p

Back issues upgrade for those on file who have previously purchased a NEXUS DVD containing all back issues: cost is AUD$30 +p&p.





PROJECT CENSORED: The Top 25 News Stories of 2015–16

Students and academics, continuing an initiative that began in 1976 at Sonoma State University, California, have compiled their list of the news most underreported by the US corporate media.

by Project Censored/Media Freedom Foundation
© October 2016

1. US Military Forces Deployed in 70 Per Cent of World's Nations

If you throw a dart at a world map and do not hit water, Nick Turse reported for TomDispatch, the odds are that US Special Operations Forces (SOF) "have been there sometime in 2015". According to a spokesperson for the Special Operations Command (SOCOM), in 2015 SOFs were deployed in 147 of the world's 195 recognised nations, an increase of 80 per cent since 2010.

As General Joseph Votel, SOCOM Commander, told the audience of the Aspen Security Forum in July 2015, more SOF troops are deployed to more locations and are conducting more operations than at the height of the Afghanistan and Iraq wars. In Turse's words: "Everyday, in around 80 or more countries that Special Operations Command will not name, they undertake missions the command refuses to talk about."

Calculated in 2014 constant dollars, the SOCOM budget has more than tripled since 2001, when funding totalled US$3 billion. By 2015, SOCOM funding had risen to nearly $10 billion. That figure, Turse noted, did not include additional funding from specific military branches, which SOCOM estimated to amount to another $8 billion annually.

Africa has seen the greatest increase in SOCOM deployments since 2006. In The Intercept in October 2015, Turse commented on the development by US forces of the Chabelley Airfield in the East African nation of Djibouti: "Unbeknownst to most Americans and without any apparent public announcement, the US has recently taken steps to transform this tiny, out-of-the-way outpost into an 'enduring' base, a key hub for its secret war, run by the US military's Joint Special Operations Command…, in Africa and the Middle East." Chabelley,

Aerial images show the secret US drone base in Djibouti, Africa.
(Photos: Google Earth; composite: TheIntercept.com, http://tinyurl.com/pwqors7)

he noted, has become "essential" to secret US drone operations over Yemen, southwestern Saudi Arabia, Somalia and parts of Ethiopia and southern Egypt. As Turse summed up: "The startling transformation of this little-known garrison in this little-known country is in line with US military activity in Africa, where, largely under the radar, the number of missions, special operations deployments, and outposts has grown rapidly and with little outside scrutiny."

Corporate media have not covered the massive expansion of Special Operations Forces around the globe, much less raised critical questions about whether these missions result in meaningful accomplishments.

2. Crisis in Evidence-Based Medicine

In April 2015, *The Lancet*'s editor, Richard Horton, wrote that "something has gone fundamentally wrong with one of our greatest human creations". Describing the upshot of a UK symposium held that month on the reproducibility and reliability of biomedical research, Horton summarised the "case against science": "[M]uch of the scientific literature, perhaps half, may simply be untrue. Afflicted by studies with small sample sizes, tiny effects, invalid exploratory analyses, and flagrant conflicts of interest, together with an obsession for pursuing fashionable trends of dubious importance, science has taken a turn towards darkness… The apparent endemicity of bad research behaviour is alarming."

Horton is not the first editor of a prominent medical journal to raise these concerns. In January 2009, Marcia Angell made comparable claims in an article for *The New York Review of Books*: "It is simply no longer possible to believe much of the clinical research that is published, or to rely on the judgment of trusted physicians or authoritative medical guidelines. I take no pleasure in this conclusion, which I reached slowly and reluctantly over my two decades as an editor of *The New England Journal of Medicine*."

No biomedical study better epitomises the corruption and conflicts of interest noted by insider critics like Horton and Angell than Study 329, a now notorious clinical trial published in July 2001 in the *Journal of the American Academy of Child & Adolescent Psychiatry*. The study's authors reported that paroxetine—marketed since 1992 by SmithKline Beecham and, after a 2000 merger, by GlaxoSmithKline (GSK) as Paxil® in the US and Seroxat® in the UK—was safe and effective for treating depressed children and adolescents. A GSK marketing campaign built on the published study, touting the drug's "remarkable efficacy and safety", led to doctors prescribing Paxil to over two million US children and adolescents by the end of 2002.

However, within a year of the report's publication, the US Food and Drug Administration declared Study 329 a "failed trial" because further evidence indicated that adolescents prescribed the drug to treat depression fared no better than those on a placebo. In 2003, UK drug regulators instructed doctors not to prescribe Seroxat to adolescents. In 2012, in what the US Department of Justice described as the "largest health care fraud settlement in US history", GSK paid a $3 billion fine to resolve its liability over fraud allegations and failure to report safety data.

In September 2015, *The BMJ* published a major reanalysis of the GSK-funded Study 329. Charlie Cooper of the *Independent* explained that the reanalysis—conducted by an international team of researchers from Australia, Canada, the US and the UK, and based on thousands of pages of newly available GSK data—"starkly" contradicted the original report's claims. Furthermore, Cooper noted, the reassessment marked "a milestone in the medical community's campaign to open up clinical trial data held by pharmaceutical companies to independent scientific scrutiny".

As Sarah Boseley wrote for the *Guardian*, the reanalysis of Study 329 found that paroxetine's beneficial effects were far less and its harmful effects far greater than the original study reported. In particular, by examining the full set of clinical trials data, the researchers who conducted the reassessment found that 11 of the 275 children and adolescents on the drug developed suicidal or self-harming behaviour. The original study had acknowledged only five of these cases. David Healy, a psychiatry professor and one of the reassessment's co-authors, observed: "This is a very high rate of kids going on to become suicidal. It doesn't take expertise to find this. It takes extraordinary expertise to avoid finding it."

Boseley's report also documented renewed calls for the *Journal of the American Academy of Child & Adolescent Psychiatry* to retract the original GSK-supported study, whose lead author was Martin Keller of Brown University. Neither the journal's editors nor any of the paper's 22 listed authors has intervened to correct the record. According to Cooper, the original report was written by "a medical writer hired by the drug company".

In May 2014, President Obama signed the Digital Accountability and Transparency Act into law. Although it requires federal agencies to make data—including funding sources for clinical trials—publicly available, the Act's requirements do not apply to privately funded biomedical research.

3. Rising Carbon Dioxide Levels Threaten to Permanently Disrupt Vital Ocean Bacteria

Imagine a car heading towards a cliff's edge with its accelerator pedal stuck to the floor. That, Robert Perkins wrote in USC News, is a metaphor for "what climate change will do to the key group of ocean bacteria known as *Trichodesmium*", according to a study published in the September 2015 issue of *Nature Communications* by researchers at the University of Southern California and the Woods Hole Oceanographic Institution.

Trichodesmium is found in nutrient-poor parts of the ocean, where it converts nitrogen gas into material that can be used by other forms of life. From algae to whales, all life needs nitrogen to grow. Reporting for the *Guardian*, Emma Howard quoted Eric Webb, one of the study's researchers, who explained how the process of "nitrogen fixation" makes *Trichodesmium* "the fertilising agent of the open ocean".

The study tested the effects of elevated levels of carbon dioxide by subjecting hundreds of generations of *Trichodesmium* bred over a five-year period to CO_2 levels predicted for the year 2100 by the Intergovernmental Panel on Climate Change. Responding to increased ocean acidification, the bacteria went into "reproductive overdrive", evolving to grow faster and to produce 50 per cent more nitrogen. One consequence of this is that *Trichodesmium* could consume significant quantities of nutrients, such as iron and phosphorus, that are in limited supply in the ocean, leaving other organisms that depend on the same nutrients without enough to survive. Alternatively, *Trichodesmium* might consume nutrients at a rate that would lead to its own extinction, leaving other organisms without the nitrogen that the bacteria make available. Either way, the effects of elevated CO_2 levels on the bacteria could trigger catastrophic effects up the marine food chain.

Most significantly, the researchers found that even when the bacteria were returned to lower, present-day levels of carbon dioxide, *Trichodesmium* remained "stuck in the fast lane", a finding described as "unprecedented" in evolutionary biology.

4. Search Engine Algorithms and Electronic Voting Machines Could Swing 2016 Election

From search engine algorithms to electronic voting machines, technology provides opportunities for manipulation of voters and their votes in ways that could profoundly affect the results of the 2016 US elections. The 2012 presidential election was won by a margin of just 3.9 per cent; and, historically, half of US presidential elections have been won by margins under 7.6 per cent. These narrow but consequential victory margins underscore the importance of understanding how secret, proprietary technologies—whether they are newly developed or increasingly outdated—potentially swing election results.

Mark Frary, in the December 2015 edition of *Index on Censorship*, described the latest research by Robert Epstein and Ronald E. Robertson of the American Institute for Behavioral Research and Technology on what they call the Search Engine Manipulation Effect (SEME). Their research focuses on the powerful role played by the secret algorithms (including Google's PageRank and Facebook's EdgeRank) that determine the contents of our Internet search results and social media news feeds.

"The results were shocking," Frary reported. Epstein and Robertson showed that biased search rankings "could shift the voting preferences of undecided voters by 20% or more". The effect could be greater than 20 per cent in some demographic groups, and—perhaps most significantly—this search-ranking bias "could be masked so that people show no awareness of the manipulation".

In an August 2015 article for Politico, Epstein wrote that the SEME "turns out to be one of the largest behavioral effects ever discovered". He and Robertson believe that "SEME is a serious threat to the democratic system of government".

Hidden algorithms shape online content in significantly different ways from more widely recognised concerns about editorial censorship on television and in print. Frary observed that on TV and in print, "there is a person at the heart of the decision process". He added: "We

can imagine how commissioning editors think, but the algorithms behind Facebook and Google are opaque."

This concern had led Emily Bell, a journalism professor at Columbia University, to declare in a November 2014 lecture: "If there is a free press, journalists are no longer in charge of it. Engineers who rarely think about journalism or cultural impact or democratic responsibility are making decisions every day that shape how news is created and disseminated."

When filtering is financially motivated, secret and beyond our control, "we should be extremely concerned", as Epstein told *Index on Censorship*. Online filtering on massive platforms such as Google and Facebook, he warned, is "rapidly becoming the most powerful form of mind control that has ever existed".

As Frary reported, Facebook, Google and others are "highly secretive about how their algorithms work".

Electronic voting machines present similar challenges, as Bob Fitrakis and Harvey Wasserman document in their book *The Strip & Flip Selection of 2016: Five Jim Crows & Electronic Election Theft*. "The electronic voting machines are owned by private corporations… And the courts have ruled that the source code on these electronic voting machines is proprietary," Wasserman told Amy Goodman of Democracy Now! in February 2016.

5. Corporate Exploitation of Global Refugee Crisis Masked as Humanitarianism

According to a June 2015 United Nations report, 60 million people worldwide are now refugees due to conflict in their home nations. The UN report indicated that during 2014, one out of every 122 people was a refugee, internally displaced or an asylum seeker, and over half of these refugees were children. While Syrian refugees accounted for the largest number (an estimated 11.5 million people), large refugee populations in other places such as Colombia, parts of Sub-Saharan Africa and Asia remain largely unreported.

According to António Guterres, the UN High Commissioner for Refugees at the time of the report: "We are witnessing a paradigm change, an unchecked slide into an era in which the scale of global forced displacement as well as the response required is now clearly dwarfing anything seen before."

Although the extent of the global refugee crisis has been covered in the corporate media (for example, the *New York Times* and the *Washington Post*), the exploitation of refugees has been less well reported and often subject to distorted pro-business coverage.

Writing in February 2016 on AlterNet, Sarah Lazare warned of the World Bank's private enterprise solution to the Syrian displacement crisis. "Under the guise of humanitarian aid," Lazare wrote, "the World Bank is enticing Western companies to launch 'new investments' in Jordan in order to profit from the labor of stranded Syrian refugees. In a country where migrant workers have faced forced servitude, torture and wage theft, there is reason to be concerned that this capital-intensive 'solution' to the mounting crisis of displacement will establish sweatshops that specifically target war refugees for hyper-exploitation."

A September 2015 *Wall Street Journal* article, which reported on the number of small businesses and large corporations that are finding ways to profit from the flood of migrants, dealt only with Syrians who had managed to migrate to European countries.

6. Over 1.5 Million American Families Live on Two Dollars Per Person Per Day

According to Kathryn J. Edin and H. Luke Shaefer, sociologists and authors of the book *$2.00 A Day: Living on Almost Nothing in America*, in 2011 more than 1.5 million US families—including three million children—lived on as little as $2.00 per person per day in any given month. Edin and Shaefer determined this figure on the basis of data from the US Census Bureau's Survey of Income and Program Participation, income data from the federal Supplemental Nutrition Assistance Program, additional data on family homelessness, and their own fieldwork in four study sites including Chicago, Cleveland and communities in Appalachia and the Mississippi Delta.

As Marcus Harrison Green wrote in *Yes! Magazine* in September 2015, the authors' depiction of what poverty truly looks like in the US reads "like a Dickens novel". He noted that the US media often neglect the experiences of the poor, making the study's findings "startling for many". From families who depend on their mother making plasma donations twice a week for their income to others with nothing but a carton of spoiled milk in their refrigerator, Edin and Shaefer documented family households living "from crisis to crisis". One informant told Shaefer that she had been beaten and raped and was always "looking out for the next threat".

Edin and Shaefer found that since 1996 the number of families living on less than $2.00 per person per day has more than doubled.

7. No End in Sight for Fukushima Disaster

Nearly five years after the 9.0 earthquake and tsunami that destroyed the nuclear power plant at Fukushima, as Dahr Jamail reported for Truthout in January 2016, Tokyo Electric Power Company (TEPCO) officials in charge of the plant continue to release large quantities of radioactive waste water into the Pacific Ocean.

Arnold Gundersen, a former nuclear industry senior vice president, called the Fukushima disaster "the biggest industrial catastrophe in the history of mankind". Jamail wrote that experts such as Gundersen continue to warn officials and the public that this problem is not going away. As Gundersen told Jamail: "With Three Mile Island and Chernobyl, and now with Fukushima, you

On the third anniversary of the nuclear catastrophe in Fukushima, Greens–European Free Alliance MEPs carried out a symbolic action at the European Parliament in Strasbourg to remember the disaster and its victims. (Photo: Greensefa, Flickr.com)

can pinpoint the exact day and time they started…but they never end."

Although the Fukushima plant has been offline since the disaster, uncontrolled fission continues to generate heat and require cooling. The cooling process has produced "hundreds of thousands, if not millions, of tons of highly radioactive water", Jamail wrote. TEPCO has no backup safety systems or proactive plan for dealing with the accumulation of contaminated water, so much of it is released into the Pacific Ocean.

Drawing on reports from the *Asahi Shimbun* and Agence France-Presse, Common Dreams remarked that on 14 September 2015 "[d]espite the objections of environmentalists and after overcoming local opposition from fishermen, the Tokyo Electric Power Co. (TEPCO) pumped more than 850 tons of groundwater from below the Fukushima nuclear power plant into the Pacific Ocean". Each day, according to these reports, TEPCO was pumping approximately 300 tons of groundwater to the surface for treatment before placing it in storage. Officially no water is released into the ocean until it is tested for radioactive content, but many experts are sceptical of this claim. Jamail noted: "The company has repeatedly come under fire for periodically dumping large amounts of radioactive water in the Pacific Ocean."

Helen Caldicott, physician, antinuclear advocate and author, told Truthout: "There is no way to prevent radioactive water [from] reaching the western shores of the North American continent and then circulating around the rest of the Pacific Ocean… At the moment, it seems like this is going to occur for the rest of time." Radioactive water affects ocean life through a process described by Caldicott as "biological magnification". The effect of radiation expands each step up the food chain—from algae to crustaceans and small fish, up to the ocean's largest creatures.

Celine-Marie Pascale of The American University conducted a content analysis of more than 2,100 articles, editorials and letters to the editor on Fukushima, published by the *Washington Post*, the *New York Times*, Politico and the Huffington Post between 11 March 2011 and 11 March 2013. Pascale found that just six per cent of the articles referred to risk to the general public. "This in itself," according to her March 2016 paper, "is a significant finding about the focus of news media during one of the largest nuclear disasters in history."

8. Syria's War Spurred by Contest for Gas Delivery to Europe, Not Muslim Sectarianism

At least four years into the crisis in Syria, "most people have no idea how this war even got started", reported Mnar Muhawesh of MintPress News in September 2015.

In 2011–12, after Syria's President, Bashar al-Assad, refused to cooperate with Turkey in its proposal to create a natural gas pipeline between Qatar and Turkey through Syria, Turkey and its allies became "the major architects of Syria's 'civil war'". The proposed pipeline would have bypassed Russia to reach European markets currently dominated by Russian gas giant Gazprom. As a result, according to Muhawesh: "[T]he Middle East is being torn to shreds by manipulative plans to gain oil and gas access by pitting people against one another based on religion. The ensuing chaos provides ample cover to install a new regime that's more amenable to opening up oil pipelines and ensuring favorable routes for the highest bidders."

In 2012, the US, the UK, France, Qatar and Saudi Arabia, along with Turkey, began to organise, arm and finance rebels to form the Free Syrian Army, consistent with long-standing US plans to destabilise Syria. These nations formed a pact, The Group of Friends of the Syrian People, that implemented a sectarian divide-and-conquer strategy to overthrow President Assad. Muhawesh wrote of the timing: "This coalition and meddling in Syria came about immediately on the heels of discussions of an Iran–Iraq–Syria gas pipeline that was to be built between 2014 and 2016 from Iran's giant South Pars field through Iraq and Syria. With a possible extension to Lebanon, it would eventually reach Europe, the target export market."

As Muhawesh noted, access to oil and gas—not sectarian differences—is the underlying cause of the violent conflict and humanitarian disaster in Syria. The war is being "sold to the public as a Sunni–Shiite conflict" by the Friends of Syria because "most people would not support any covert funding and arming of rebels or direct intervention".

Based on secret US cables revealed by WikiLeaks, Muhawesh commented: "Foreign meddling in Syria began several years before the Syrian revolt erupted." US Department of State cables from 2006 documented plans to instigate civil strife that would lead to the overthrow of Assad's government. The leaks revealed US partnering with nations like Saudi Arabia, Turkey, Qatar and Egypt to fuel Sunni–Shiite sectarianism in dividing Syria.

Although there is plenty of coverage in US corporate media about the violence in Syria and the refugee crisis that is sweeping Europe and reaching North America, this has failed to address the economic interests, including control of potentially lucrative gas pipelines, that motivate the US and its allies. Instead, corporate news coverage has characterised the conflict in Syria as a battle for democracy that has been hijacked by Sunni–Shiite interests. Much of what passes for news coverage in the corporate press adheres to a pattern that Muhawesh identified and critiqued as simplistic and "Orientalist", framing conflict in the Middle East and especially Syria as sectarian in order to "paint the region and its people as barbaric".

9. Big Pharma Political Lobbying Not Limited to Presidential Campaigns

Pharmaceutical companies have been among the biggest political spenders for years, according to data from the Center for Responsive Politics. As Mike Ludwig reported for Truthout in September 2015, large pharmaceutical companies made over $51 million in campaign donations during the 2012 US federal elections and nearly $32 million in the 2014 elections. As of September 2015, they had already put $10 million into the 2016 elections. During the 2014 elections, industry giant Pfizer led drug companies with $1.5 million in federal campaign donations, followed by Amgen with $1.3 million and McKesson Corporation with $1.1 million.

Although these are considerable sums of money, large pharmaceutical companies' campaign donations pale in comparison to their spending on lobbying politicians and influencing policies outside of elections. As Ludwig noted, data gathered on the 2014 elections showed that the industry spent $7 on lobbying for every dollar spent on campaign contributions.

According to records from MapLight's lobbying database, the Pharmaceutical Research and Manufacturers of America (PhRMA) has been the drug companies' lead lobbying group. Since 2008, PhRMA has spent nearly $174 million on lobbying, making it the fifth-largest lobbying spender in the nation, outspending powerful defence contractors (e.g., Boeing and Northrop Grumman), the oil and gas industry (e.g., ExxonMobil) and Koch Industries, among others. Pfizer is one of the nation's top 25 lobbying spenders, having outlaid over $106 million since 2008, with $9.4 million of that in 2015 alone.

As Ludwig wrote, the pharmaceutical industry includes some of the most profitable companies in the world, and the industry has "a clear interest in maintaining the political status quo". While representatives of the industry assure the public that profits go to the research and development of new drugs, a closer examination of Big Pharma expenditure on political contributions and, especially, lobbying reveals that it spends hundreds of millions of dollars each year to influence US politics, health care policy and international trade.

10. CISA: The Internet Surveillance Act that No One is Discussing

On 18 December 2015, President Obama signed the Cybersecurity Information Sharing Act (CISA) into law as part of a 2,000-page "omnibus" spending bill. As drafted, CISA is intended to "improve cybersecurity in the United States through enhanced sharing of information about cybersecurity threats, and for other purposes". The Act authorises the creation of a system for corporate informants to provide customers' data to the Department of Homeland Security (DHS), which in turn would share this information with other federal agencies such as the departments of Commerce, Defense (which includes the National Security Agency), Energy, Justice (which includes the Federal Bureau of Investigation) and the Treasury (which oversees the Internal Revenue Service) as well as the Office of the Director of National Intelligence.

As Andy Greenberg reported for *Wired* in December, the final Senate version of the bill removed personal information protections that privacy advocates had fought successfully to have included in a previous version. He noted that CISA had "alarmed the privacy community" by providing a loophole in privacy laws that would enable intelligence and law enforcement officials to engage in surveillance without warrants. The version of CISA approved in the Senate by a vote of 74 to 21 in October 2015, Greenberg wrote, "creates the ability for the president to set up 'portals' for agencies like the FBI and the Office of the Director of National Intelligence, so that companies hand information directly to law

enforcement and intelligence agencies instead of to the Department of Homeland Security".

Greenberg added that tech firms—including Apple, Twitter and Reddit—as well as 55 civil liberties groups and security experts had opposed the bill, and that in July 2015 the DHS itself had warned that the bill would "sweep away privacy protections" while inundating the agency with data of "dubious value".

11. CIA Warned Bush Administration of Terrorist Attack Prior to 9/11

Based on new interviews with Cofer Black, a former Director of the Counterterrorism Center of the Central Intelligence Agency (CIA), and George Tenet, a former Director of the CIA, Chris Whipple reported in Politico in November 2015 that the George W. Bush administration had ignored CIA warnings in the months before 9/11. Noting that neither Tenet nor Black had spoken about the warnings "in such detail until now—or been so emphatic about how specific and pressing their warnings really were", Whipple wrote that, starting in spring 2001, "the CIA had "repeatedly and urgently" warned the White House that an attack was imminent.

In spring 2001, Tenet and Black proposed to Bush administration officials a plan aimed at ending the threat of al-Qaeda. Known as "the Blue Sky paper", the plan called for covert CIA and military operations against al-Qaeda: "getting into the Afghan sanctuary, launching a paramilitary operation, creating a bridge with Uzbekistan". Tenet told Whipple that the White House responded: "We're not quite ready to consider this. We don't want to start the clock ticking." Whipple interpreted Tenet's account to imply that the White House, in Whipple's words, "did not want a paper trail to show that they'd been warned". According to Black, Bush's staff was "mentally stuck" in an outdated conception of terrorism. They were "used to terrorists being Euro-lefties", Black told Whipple, making it "very difficult" to communicate the urgency of the CIA's warnings regarding al-Qaeda.

12. Why Our Lives Depend on Keeping 80 Per Cent of Fossil Fuels in the Ground

The Spring 2016 issue of *Yes! Magazine* featured articles on the theme "Life After Oil". Bill McKibben, the founder of 350.org, wrote that when it comes to climate change the essential problem is not "industry versus environmentalists or Republicans against Democrats". It's a case of "people against physics". For that reason, the compromises and trade-offs typical of most public policy debates will not work because "[l]obbying physics is useless; it just keeps doing what it does".

McKibben reported that we "have to keep 80 percent of the fossil fuel reserves that we know about underground"—the aim of the Keep It In The Ground movement that began five years ago.

At that time, McKibben remarked, environmentalists engaged in climate policy focused on reducing demand. Such an approach has been making "slow but steady progress". So the Keep It In The Ground movement has focused on the supply side of climate policy. The world's remaining concentrations of fossil fuels can be understood as "money pits"—untapped coal, gas and oil that could be worth $20 trillion—or as "carbon bombs", which will wreck the planet if they are used. For this reason, Keep It In The Ground has opposed the Keystone Pipeline System in Canada and the US and what would have been the world's largest coal mine in Queensland, Australia, while advocating for colleges and universities, doctors' associations and churches from around the world to divest from fossil fuels.

Blocking pipelines, McKibben commented, cuts the fuse on the carbon bomb, while divestment campaigns have "driven the necessity of keeping carbon underground from the fringes into the heart of the world's establishment". With alternatives to fossil fuel becoming increasingly less expensive, "we don't need to win this fight forever", he noted. Instead, if we can hold off fossil fuel development for "just a few more years—then we'll have made the transition to clean energy irreversible".

13. US "Vaccine Court" Has Paid over Three Billion Dollars to Vaccine-Injured Families

Since 1988, the US government has paid $3.2 billion to 4,150 individuals and families for injuries and deaths attributed to shots for flu, diphtheria, whooping cough and other conditions. Though vaccines "remain one of the greatest success stories in public health", Tracy Seipel wrote for the *Marin Independent Journal* in August 2015, "for some Americans, rare side effects of inoculations have led to hardship, serious injury, even death".

As Anders Kelto reported on NPR's *All Things Considered* in June 2015, high-profile lawsuits against drug companies in the 1980s successfully charged that children immunised with the diphtheria-pertussis-tetanus (DPT) vaccine experienced adverse reactions, including seizures and brain damage, leading to at least two court settlements worth millions of dollars. In response, drug

companies threatened to stop producing vaccines for the US market because litigation risks were too great unless the government provided them with "no-fault" protection. NPR quoted Anna Kirkland, an associate professor of women's studies and political science at the University of Michigan: "There was a real fear that some of our childhood vaccines would no longer be available."

In 1986, that fear led Congress to establish the little-known Office of Special Masters of the US Court of Federal Claims (known informally as the "vaccine court") and the National Vaccine Injury Compensation Program. NPR reported that the court "administers a no-fault compensation program that serves as an alternative to the traditional US tort system". As Kirkland explained, the vaccine court serves to "shield the vaccine makers from liability". It also created a fund to compensate injured vaccine recipients, through a 75-cent surcharge on every vaccine dose.

According to the NPR report: "Petitioners don't have to prove that the immunization caused their condition—the court operates under a presumption of causation if the injury develops within a certain period of time." To win a claim, petitioners must provide proof of developing a condition listed in the vaccine injury table. Settlements for conditions not included in the table require "a higher burden of proof". But, as Seipel clarified, a petition has to be filed "within three years of the first symptom of the injury, within two years of the death, or within four years after the first symptom of the vaccine-related injury from which the death resulted".

However, most people simply do not know about the National Vaccine Injury Compensation Program, and they may not learn about it in time to petition. And in cases where parents allege that a vaccine has injured their child, the full extent of the injury may not be known until the child is older.

Jessica Boehm's May 2015 report for Cronkite News indicated that annual revenues of the Vaccine Injury Compensation Trust Fund significantly exceed the amount spent on injury claims through the compensation program. According to Government Accountability Office figures, since 2005 the vaccine court has compensated an average of 190 of the 466 claims it receives each year. During that time, the program's annual operational spend has averaged $148.7 million. Meanwhile, the balance of the trust fund "has climbed past $3.5 billion".

14. FBI's New Plan to Spy on High School Students

Under new guidelines issued in January 2016, the Federal Bureau of Investigation (FBI) is instructing high schools across the US to report students who criticise government policies and "western corruption" as potential future terrorists, Sarah Lazare wrote for AlterNet in March. The new guidelines also warn that young

people who are poor, are immigrants or talk about travel to "suspicious" countries are more likely to commit violence. As Lazare reported, the FBI's "Preventing Violent Extremism in Schools" guidelines combine "McCarthy-era theories of radicalization"—in which authorities monitor thoughts and behaviours suspected of leading to acts of violent subversion—with elements of a "widely unpopular" and "deeply controversial" British surveillance program, known as Prevent, that monitors Muslim communities and individuals.

The new guidelines depict US high schools as "hotbeds of extremism", Lazare summarised. Claiming that youth "possess inherent risk factors", the FBI guidelines describe high school students as "ideal targets" for recruitment by violent extremists. Educational materials prepared by the FBI for schools indicate that activities ranging from using "unusual language" or "private messaging apps" and encryption ("going dark", in FBI-speak) to playing online games outside of school could indicate that "someone plans to commit violence".

In calling for schools to create "threat assessment teams" and "enhance domain awareness", the FBI is engaging in what Danielle Jefferis of the American Civil Liberties Union's National Security Project, writing for Just Security in March 2016, characterised as "fear mongering", which will "almost assuredly ratchet up the pressure on school officials to go to law enforcement before seeking out alternatives".

15. Climate Change and Gender Inequality

We need to understand climate change through the lens of gender equality, Georgie Johnson reported for Greenpeace's Energydesk in March 2016. As Johnson's research showed, climate change has different impacts on men and women based on pre-existing social and economic inequalities.

Because most international efforts to address climate change do not include women, the resulting policies do not take into account the particular challenges that

climate change poses for women and girls. This is ironic because, according to a 2014 European Union study, women are more likely than men to be concerned about climate change and make sacrifices to reduce emissions.

16. Over Three-Quarters of Freedom of Information Act Requests Not Fully Answered

On his election, President Obama promised greater governmental transparency to the American people. In practice, the Obama administration has set a record for failures to find and produce government documents in response to Freedom of Information Act (FOIA) requests.

As Ted Bridis and Jack Gillum reported for Associated Press's The Big Story in March 2016, government searchers had come up "empty-handed" in more than one in every six cases, or 129,825 times, during the 2015 fiscal year. Bridis and Gillum wrote: "People who asked for records under the law received censored files or nothing in 77 percent of requests, also a record." The 77 per cent figure represents a 12 per cent increase compared with the first full year after President Obama's election.

Signed into law by President Lyndon Johnson in 1966, the Freedom of Information Act encourages and enforces government disclosures to citizens and foreigners who request federal records, with exemptions for material that would threaten national security, violate personal privacy or expose confidential decision-making in certain areas.

Censorship and refusal to disclose are only two parts of a three-piece puzzle, the last being human error. As Bridis and Gillum revealed, federal workers and the procedures they use to retrieve requested files also contribute to the problem. Though federal employees are required by law to make a reasonable search for requested records, the means of doing so are left to their discretion.

17. Deadly Medical Neglect for Immigrants in Privatised US Prisons

Over 100 inmates in privatised, immigrant-only prisons in the US have died, many in disturbing circumstances involving negligent medical and mental health care, Seth Freed Wessler disclosed in *The Nation* in January 2016. His article documented the deadly consequences of medical neglect in 11 immigrant-only prisons, known as Criminal Alien Requirement facilities. From 1998 to 2014, at least 137 inmates died in these special facilities run by the Corrections Corporation of America, the GEO Group and the Management & Training Corporation under contract with the Federal Bureau of Prisons (BOP).

Wessler's report is based on more than 9,000 pages of medical records for 103 of the inmates who died in custody since the BOP first opened contract facilities. Wessler fought for over two years to obtain these files, using FOIA requests and ultimately a federal lawsuit to compel the BOP to release the records.

The Nation convened a panel of 23 independent reviewers, including 17 medical doctors and six psychiatrists, to review the files. Of 77 case files adequate for rendering a judgement, in 25 of these cases multiple reviewers found evidence of inadequate care that likely contributed to an inmate's premature death. In just 39 cases did the reviewers find that care had likely been in accordance with recognised medical standards.

Unlike prisons that are run directly by the federal government—including immigration detention centres, where federal authorities typically hold immigrants pending deportation—these private, for-profit institutions are not held to the same standards.

18. Women's Movements Offer Global Paradigm Shift towards Social Justice

From LGBTQ movements and indigenous farming struggles to Black Lives Matter and efforts to create sustainable development, women around the world are leading the way towards greater social justice.

In *Yes! Magazine* in March 2016, Rucha Chitnis wrote: "In the face of growing corporate power, land grabs, economic injustice, and climate change, women's movements offer a paradigm shift. They have redefined leadership and development models, connected the dots between issues and oppression, prioritized collective power and movement-building, and critically examined how issues of gender, race, caste, class, sexuality, and ability disproportionately exclude and marginalize."

In her report, Chitnis gave numerous examples of such developments. One is the National Domestic Workers Alliance, which stood in solidarity with the women of Ferguson, Missouri, in opposition to police brutality in that city.

Chitnis summarised: "Whether it is indigenous women in the Amazon fighting corporate polluters and climate change or undocumented Latina domestic workers advocating for worker rights and dignity in California, women's groups and networks are making links between unbridled capitalism, violence, and the erosion of human rights and destruction of the Earth."

19. Global Epidemic of Electronic Waste

Consumers in the US generate an estimated 3.14 million tons of electronic waste (e-waste) annually, according to the US Environmental Protection Agency, and about 40 per cent of this—50,000 dump-truck loads a year—goes to be recycled. A 2016 study by the Basel Action Network (BAN), a nonprofit group that aims to end the global trade in toxic electronic waste, found that nearly one-third of this waste is exported to developing countries where the low-tech dismantling of the recycled equipment contaminates the environment and endangers workers, many of whom are children.

From July 2014 to December 2015, BAN installed GPS tracking devices in 200 used, nonfunctional pieces of technology, delivered the equipment to publicly accessible e-waste recycling drop-off sites around the US and then followed what happened. As of May 2016, BAN found that 65 (~32 per cent) of the items with tracking devices passed through US recyclers and were exported overseas. BAN estimated that 62 (31 per cent) of the tracked items were likely to be illegal shipments, based on laws in the places where the e-waste ended up.

BAN partnered with Carlo Ratti of the Massachusetts Institute of Technology's Senseable City Lab to determine exactly where the equipment went. Ratti told the PBS *NewsHour* that he and his fellow researchers were surprised by how far the e-waste had travelled. Global e-waste flows "actually almost cover the whole planet". Each recycled device in the BAN study travelled an average of 2,500 miles (over 4,000 kilometres). Most equipment went to Hong Kong, but BAN tracked devices to 10 different countries including China, Taiwan, Pakistan, Mexico, Thailand, Cambodia and Kenya.

If improperly disposed, e-waste can release a variety of toxins including lead, mercury and cadmium into the environment. However, the US only restricts e-waste exports of one type of component: cathode ray tubes. Though many US states prohibit dumping used electronics in landfills and have e-waste recycling programs, no federal law regulates e-waste recycling.

Since 1989, 182 national governments and the European Union have signed the Basel Convention, an international treaty to stop developed countries from dumping hazardous waste in less-developed nations. As noted by EarthFix in May 2016, the US is the world's only industrialised country that has not ratified the treaty.

20. The Walmarting of American Education

In January 2016, Walmart publicised a plan to close 269 of its retail stores. As Jeff Bryant reported for AlterNet in March, the announcement was significant news in small towns and suburban communities directly affected by the closures but otherwise it did not garner prominent media attention.

Also in January, the Walton Family Foundation (WFF) revealed a five-year strategic plan to spend $1.0 billion to support and expand charter schools in 13 US cities and states. As *Education Week* commented, the WFF is "doubling down on its investments in school choice". Over the past 20 years, the WFF has given over $1.3 billion to K–12 education, according to its own calculations. The Walton Family Foundation boasts that one in four charter schools across the nation has received WFF start-up funds.

21. Little Guantánamos: Secretive "Communication Management Units" in the US

In March 2016, inmates from two highly secretive US prisons, known as Communication Management Units (CMUs), appealed a previous summary judgement for the government in their case against the Federal Bureau of Prisons. In March 2015, the US District Court for the District of Columbia had ruled against the prisoners, asserting that CMUs did not violate inmates' rights because restrictions were "limited in nature" compared to ordinary prison units and far better than solitary confinement. In the appeal, attorneys for the Center for Constitutional Rights argued that CMUs represent a "fundamental disruption" to prisoners' rights and freedoms. CMUs have strict regulations against outside communication. Prisoners are isolated from the rest of the prison population and are limited to four hours of visits per month (with no direct contact permitted) and three phones calls per month (for a total of 45 minutes), which must be carried out in English.

In January 2015, the Federal Bureau of Prisons had finalised rules regarding who can be sent to CMUs and how the facilities should operate. But, as Christie Thompson of The Marshall Project explained, "prisoner advocates claim the new rules impose even stricter limits on contact without providing a legitimate way for inmates to appeal being placed under such restrictions".

About 178 inmates are held in the CMUs. Nearly 60 per cent of them are Muslim, and many of the others are animal rights and environmental activists. Journalist Will Potter, who has visited a CMU, told The Real News

Network in October 2015 that CMUs are effectively "political prisons for political prisoners".

22. Department of Education Cooperates with ALEC to Privatise Education

The Department of Education (DOE) and school districts throughout the US are working with billionaire families such as the Waltons and Netflix CEO Reed Hastings to undermine public education, Dustin Beilke reported for PRWatch in January 2016.

Instead of defending public education in pursuit of equity for all students, the DOE is working with organisations like the American Legislative Exchange Council (ALEC)—an alliance of corporate lobbyists and state legislators—as well as local chambers of commerce to encourage the conversion of public institutions into private charter schools.

A December 2015 DOE presentation showed that since its inception in 1995, the Charter Schools Program had spent $3.3 billion of taxpayer money to boost charter schools, supporting an uncritical assessment of how effective charter schools actually are.

According to the Center for Media and Democracy (CMD), although many charter schools have failed and closed in the last 20 years, the DOE continues to provide significant funding to promote them. An October 2015 CMD investigation, "Charter School Black Hole", uncovered how much the federal government has invested in charter schools, as well as the DOE's ties to ALEC. Overall, the DOE overview suggested it functions as a "propagandist for charter schools", Beilke wrote.

23. Modern-Day Child Slavery: Sex Trafficking of Underage Girls in the US

In December 2015, D. Parvaz's seven-part investigative report, "Selling American Girls", for Al Jazeera America, documented sex trafficking in the United States. Each part of her report examined a different role in the sex trafficking trade and its enforcement, from the prostitutes and their buyers, pimps and advocates to law enforcement officers and judges.

Sex trafficking in the US is pervasive. According to the Department of Justice, human trafficking is the second-fastest-growing criminal enterprise after drug trafficking, with minors constituting roughly half the victims. In 2015, over 4,100 of the 5,544 trafficking cases reported to the National Human Trafficking Resource Center's hotline involved sex trafficking. A 2014 Urban Institute study found that the underground commercial sex economy in the US produced multimillion-dollar profits. The report's researchers studied eight major US cities—Atlanta, Dallas, Denver, Kansas City, Miami, Seattle, San Diego and Washington, DC—to estimate that, in each city, the underground sex economy was worth between $39.9 and $290 million in 2007.

Many pimps look for children who come from unstable family backgrounds or destitute neighbourhoods. According to FAIR Girls, an anti-trafficking organisation, 70–75 per cent of the girls they assisted had histories with foster care systems.

While safe harbour laws, which criminalise adults who purchase sex with minors, have been passed in 34 states, according to the Polaris project these laws tend to vary widely from state to state, leaving many girls treated as criminals rather than as victims.

In a case initiated by the US in 2013, the WTO found that India's solar initiative, which requires that 10 per cent of solar cells be produced locally, violated international trade laws.

24. India's Solar Plans Blocked by US Interests and World Trade Organization

The United Nations Climate Change Conference, held in December 2015 in Paris, featured lofty rhetoric about international cooperation to tackle climate change.

However, in February 2016, the World Trade Organization (WTO) ruled against India's Jawaharlal Nehru National Solar Mission. In a case initiated by the US in 2013, the WTO found that India's solar initiative, which requires that 10 per cent of solar cells be produced locally, violated international trade laws. As Dipti Bhatnagar and Sam Cossar-Gilbert of Friends of the Earth International reported in *The Ecologist*: "This WTO ruling sets a dangerous precedent for countries wanting to support homegrown renewable energy initiatives."

The National Solar Mission was launched in 2010 by India's then Prime Minister, Manmohan Singh. Ben Beachy and Ilana Solomon of the Sierra Club described how the National Solar Mission aims to develop long-term policy, research and development, and domestic production to reduce the cost of solar power generation in India and, ultimately, to increase India's solar capacity to 100,000 megawatts by 2022—a target that would surpass the combined current solar capacity of the world's top five solar-producing countries. By the time of the WTO ruling, the National Solar Mission had already increased India's solar capacity from "nearly nothing" to 5,000 megawatts, Beachy and Solomon reported.

However, US Trade Representative Michael Froman claimed that India's subsidised solar program discriminated against American suppliers, arguing that India's solar plan created unfair barriers to imports of US-made solar panels. As Beachy and Solomon summarised, "the WTO has officially asserted that antiquated trade rules trump climate imperatives".

Continued on page 79

NEW DVD

THE MYTHS AND REALITY OF THE VACCINATION CAMPAIGNS

We don't vaccinate!

...a hard-hitting, informative and well-presented documentary that includes interviews with parents, doctors, medical researchers and natural therapists.

Available from Nexus Magazine $35.00 (+p&p in NZ)
Use coupon on page 96 to order or visit

www.nexusmagazine.com

A movie by Michael Leitner

READING BETWEEN THE LIES
Public Relations, Propaganda and the Press

by Leon Horton © October 2016

If we understand the mechanism and motives of the group mind, it is now possible to control and regiment the masses according to our will without their knowing it.[1]

— Edward L. Bernays, PR guru (1891–1995)

Spin Doctoring

The relationship between the public relations (PR) industry and the so-called free press has always been difficult to assess, the line between real news stories and self-serving publicity blurred by commercial concerns and political "spin". From its accepted origins in the US in the 1920s, PR has extended its manipulating fingers from the advertising agencies of Madison Avenue into almost every aspect of our daily lives: telling us how to behave, what to think, what to accept as truth. That we might not realise just how much we are controlled by it can hardly be said to be our own fault, however, when we consider that even the most trusted quarters of the media are complicit in this…

In an age of disparity, of massive social and political upheavals, of escalating wars and serious environmental

Myth of the Independent Press

"One night, probably in 1880, John Swinton, then the pre-eminent New York journalist, was the guest of honor at a banquet given him by the leaders of his craft. Someone who knew neither the press nor Swinton offered a toast to the independent press. Swinton outraged his colleagues by replying:

'There is no such thing, at this date of the world's history, in America, as an independent press. You know it and I know it.

'There is not one of you who dares to write your honest opinion, and, if you did, you know beforehand that it would never appear in print. I am paid weekly for keeping my honest opinions out of the paper I am connected with. Others of you are paid similar salaries for similar things, and any of you who would be so foolish as to write honest opinions would be out on the streets looking for another job. If I allowed my honest opinions to appear in one issue of my paper, before twenty-four hours my occupation would be gone.

'The business of the journalists is to destroy the truth, to lie outright, to pervert, to vilify, to fawn at the feet of mammon, and to sell his country and his race for his daily bread. You know it and I know it, and what folly is this toasting an independent press.

'We are the tools and vassals of rich men behind the scenes. We are the jumping jacks; they pull the strings and we dance. Our talents, our possibilities and our lives are all the property of other men. We are intellectual prostitutes.'"

— Quoted by Richard O. Boyer and Herbert M. Morais in their book *Labor's Untold Story,* Cameron Associates, New York, 1955

issues, we are ever more reliant on the mass media to understand the times we live in and the problems we face. But in an age of 24-hour media coverage, of cross-platform access, journalists and commentators are under increasing pressure to find material to fill the headlines—often at the expense of serious investigative reporting. As a result, even the most respected media outlets, including the BBC, are forced to turn to unreliable sources. And that's where PR comes in.

In their 1985 book *PR: How the Public Relations Industry Writes the News*, authors Jeff and Marie Blyskal write:

"PR people know how the press thinks. Thus they are able to tailor their publicity so that journalists will listen and cover it. As a result much of the news you read in newspapers and magazines or watch on television and hear on radio is heavily influenced by public relations people. Whole sections of the news are virtually owned by PR… Unfortunately 'news' hatched by a PR person and journalist working together looks much like real news dug up by enterprising journalists working independently. The public thus does not know which news stories and journalists are playing servant to PR."[2]

That the public relations industry and the press are virtually indistinguishable from one another is nothing new, of course, and might not seem at first glance to be anything too worrying. After all, most of us are adept enough at spotting damage limitation and blatant PR when we see it splashed across the headlines. But to blithely accept this as the norm is to give credence to the lie that it is a relationship based on collaboration and not corruption. To truly understand the toxic nature of this dangerous marriage, we need to return to a time before "propaganda" became a dirty word…

Manipulating the Masses

Dateline: New York City, 1929… At a time when women smoking in public is seen as unladylike and associated with prostitutes, 30 New York debutantes parade along Fifth Avenue, openly smoking Lucky Strike cigarettes in an act of defiance and emancipation. Journalists are informed that the cigarettes are "torches of freedom"—that this is women's liberation in action—and the story is picked up by newspapers all over the United States. Within days, women everywhere are taking to the streets and lighting up.

This was big news in its day. Except that it wasn't. It was completely fabricated. The debutantes were, in fact, models hired by publicist Edward Bernays—who, in turn, had been hired by George Washington Hill, President of the American Tobacco Company, to increase sales of cigarettes. The event is regarded by many as the moment that launched a whole new industry: public relations. That the press had been fooled by this publicity stunt received little complaint—tempered, no doubt, by increased newspaper and magazine sales—and from that day forwards the writing was on the wall.

Born in Vienna in 1891, Edward Bernays was a nephew of Sigmund Freud and used his uncle's reputation and theories of psychoanalysis to develop his own reputation as a thinker and theorist. Bernays described himself as a psychoanalyst to troubled corporations, and he furthered this image by authoring several books on the subject, including *Crystallizing Public Opinion* and *Propaganda*. He defined his profession as akin to that of a "practicing social scientist" whose "competence is like that of the industrial engineer, the management engineer, or the investment counselor in their respective fields".[3]

In his 1928 work *Propaganda*, Bernays sets out his mandate:

"The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element in democratic society. Those who manipulate this unseen mechanism of society constitute

an invisible government which is the true ruling power of our country…

"We are governed, our minds are molded, our tastes formed, our ideas suggested, largely by men we have never heard of. This is a logical result of the way in which our democratic society is organized. Vast numbers of human beings must cooperate in this manner if they are to live together as a smoothly functioning society."[4]

With the rise of the Nazis and their appropriation of propaganda techniques in the 1930s, it isn't clear if Bernays came to regret his words, but even by the standards of the 1920s they make for uncomfortable reading:

"[I]n almost every act of our daily lives, whether in the sphere of politics or business, in our social conduct or our ethical thinking, we are dominated by the relatively small number of persons…who understand the mental processes and social patterns of the masses. It is they who pull the wires which control the public mind…"[5]

Bernays was by no means the first practitioner of PR techniques, but within the industry itself he is often considered the founding father.

Today, PR is a multibillion-dollar communications medium in its own right—a vast empire of control, answerable to no one.

In the introduction to the US edition of John Stauber and Sheldon Rampton's 1995 book *Toxic Sludge Is Good For You: Lies, Damn Lies and the Public Relations Industry,* journalist and author Mark Dowie writes:

"The modern 'account' managed by a PR/advertising giant can now package a global campaign that includes a strategic blend of 'paid media' (advertising) and 'free media' (public relations). Add to that some of the other standard services offered by most PR firms—including 'crisis management', industrial espionage, organized censorship and infiltration of civic and political groups—and you have a formidable combination of persuasive techniques available to large corporations and anyone else who can afford to hire the services of a PR firm."[6]

How, then, did PR, with its cache of tried-and-tested methods for creating pseudo-events, manufacturing free publicity and controlling public image, manage to bleed from the adverts selling us cigarettes and mouthwash into the editorials of so-called hard news? How have journalists allowed this to happen? The truth is that PR hasn't merely leaked into the news, it has *saturated* it. And if journalists themselves can't tell the difference, then what hope is there for the rest of us? Surely, that's the real story.

Propagandising Journalism

It is an accepted fact within the industry that the media hardly ever report on themselves. Only when they absolutely cannot ignore a story, such as illegal phone-tapping, will journalists bite each others' tails. This is one industry where dog eats dog at its own peril. But in 2009, award-winning *Guardian* journalist Nick Davies did just that with the release of his book *Flat Earth News*.

A seminal piece of investigative journalism, *Flat Earth News* exposes the extent to which the global media have become polluted by PR and propaganda, and is a must-read for anyone concerned about journalism. In discussing the influence of PR on his profession, Davies asserts:

"The overt links to the media and the whole well-worn idea of 'spin' scarcely begin to capture the breadth and ingenuity of the tactics which are now used by the global industry of public relations. And it is this huge industry of manipulation—targeted at a structurally vulnerable media—which feeds falsehood and distortion directly into our news channels…"[7]

What Davies means by a "vulnerable media" is puzzling at first, but in great detail he describes how time and again the press has fallen foul of PR and been caught out reporting unsubstantiated stories as fact. From the anticipated millennium bug crash that never came to pass, to the supposed legality of the Bush–Blair war on Iraq, to the false assertions made daily by the *Daily Mail*, Davies in *Flat Earth News* brilliantly captures an industry in crisis and a profession under orders to relay lies and "sex up" the truth.

The problem, as Davies sees it, is essentially one of supply and demand: a dearth of supply, exacerbated by

serious cuts in the number of journalists, and a constant demand by the corporate owners to maximise profits. Media moguls, such as Rupert Murdoch, have systematically bought up an industry that once prided itself on its duty and freedom to tell the truth, bent it to their own commercial and political wills, and made such severe cutbacks in staff that few journalists making a living today have the time or resources to pursue a story through serious investigation. Instead, journalists are forced to rely on pre-packaged stories handed down to them by PR companies and news-gathering (wire) agencies such as the Press Association and Reuters.

Print under the Microscope

To gauge the degree to which the UK media, and by extension the global media, are reliant on stories coming "off the wire", Davies commissioned a team of researchers from Cardiff University's School of Journalism, Media and Cultural Studies to investigate a sample of news stories running through the most prestigious British newspapers, namely the *Times*, the *Guardian*, the *Independent* and the *Daily Telegraph*, with the *Daily Mail* thrown in for good measure. What they found was startling.

Across a total of 2,207 print stories over the course of two weeks, the research team discovered that 60 per cent consisted wholly or mainly of wire and/or PR copy, with a further 20 per cent containing elements of wire/PR to which more material had been added. They were unable to identify the source of eight per cent, which left just 12 per cent of the stories where the researchers could be sure that all the material had been generated by the reporters themselves. Moreover, only one per cent of the wire stories included the source. Most of the wire stories carried the misleading "by a staff reporter" by-line or named a reporter who had rewritten the agency copy. Further to this, 70 per cent of the stories passed into print without being checked for accuracy.

According to Davies, the Cardiff researchers drew this conclusion:

"Taken together, these data portray a picture of journalism in which any meaningful independent journalistic activity by the press is the exception rather than the rule. We are not talking about investigative journalism here, but the everyday practices of news judgement, fact-checking, balance, criticising and interrogating sources et cetera, that are, in theory, central to routine, day-to-day journalism."[8]

Broadcast News Put to the Test

Next, the Cardiff team turned its attention to broadcasting and found an equally dire situation in UK commercial news. As Davies reports:

"By 2004, the eleven different companies which used to own the ITV network had collapsed into a single monopoly whose regional newsrooms saw their journalists and film crews cut, while young graduate trainees were pulled in on cheap wages to fill the gap. In 2006, ITV announced plans to cut their budget by a further £100 million while giving their shareholders £500 million."[9]

With such drastic cutbacks to their traditional supply lines, broadcast journalists found themselves in the same unenviable position as their print colleagues: forced to rely on ready-made, pre-packaged material from unsubstantiated sources—PR on a plate.

Surely, though, there was still a corner of news journalism safe in the hands of the BBC, mindful of its public service remit and the security of the licence fee? Not so, according to the Cardiff researchers. After attempting to justify the licence fee by introducing an internal market, in 1997 the BBC announced a huge 25 per cent cut in staff over the following five years. Then, as Davies puts it:

"In March 2005, the new director general, Mark Thompson, proposed another 13% cut, including 12% of the jobs in BBC News and 21% in Factual and Learning. By October 2007, he was announcing the removal of another 500 journalists from News as well the loss of half of the remaining 1,200 staff in Factual and Learning. And all this was happening as the corporation was increasing its news output by moving into twenty-four-hour broadcasting."[10]

No matter how we look at this picture, either as expedient cost-cutting or as myopic business practice, the fact remains that when you cut away enough fat you start to slice into healthy flesh. And when you do that, the whole body suffers: not just those working within the industry, the "vulnerable media", who quite rightly have a duty of care for their own work, but also their respective audiences—we, the public, "the consumers"—who have the right to expect our news to be both accurate and unfettered by commercial logic.

Churnalism in the New Media

In his final analysis, Davies concludes:

"[T]he tendency for the new media to recycle ignorance…flows directly from the behaviour of the new

corporate owners of the media who have cut editorial staffing while increasing editorial output; slashed the old supply lines which used to feed up raw information from the ground; and, with the advent of news websites, added the new imperative of speed. Working in a news factory, without the time to check, without the chance to go out and make contacts and find leads, reporters are reduced to churnalism, to the passive processing of material which overwhelmingly tends to be supplied for them by outsiders, particularly wire agencies and PR. In these circumstances, the news factory will produce an effective and reliable product for its readers and viewers and listeners only if those outside suppliers are delivering an effective and reliable account of the world. Are they?"[11]

One of the biggest outside suppliers, the UK's Press Association (PA), has such credibility with British media outlets that it is treated as a reliable source that does not require checking. In December 2004, for example, the BBC issued a notice to staff that the PA "can be treated as a confirmed, single source".[12] All of the UK's national and regional newspapers subscribe to the PA's news service, as does ITV and the major websites handling UK news.

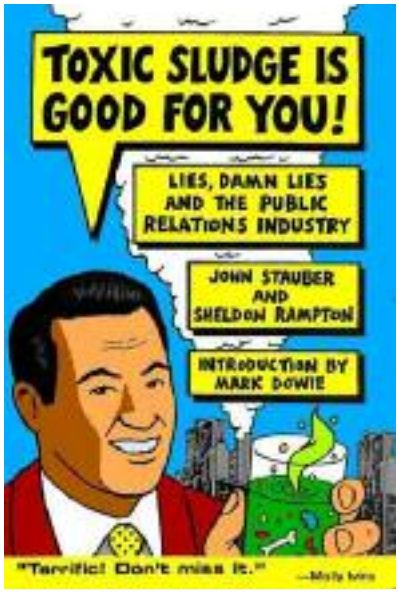
Unfortunately, the PA faces the same problems as other media outlets: slashing staff, including its own journalists, while increasing output. This problem is compounded by the fact that the Press Association, like Reuters, is a news agency, not a newspaper. Wire agencies are under no obligation to check whether their stories are true; they simply report what they are told and sell this "information" on, creating an open door for PR.

Just as the UK media are overreliant on the Press Association for domestic news, most international newspapers, broadcasters and websites rely heavily on just two wire agencies: Associated Press and Reuters. Both agencies claim their daily output of news to be consumed in one form or another by more than a billion people across the globe—a monopoly that, left unchecked, is inevitably a target for PR—and both agencies suffer under the weight of staff shortages and increased workloads. On the face of it, who can blame the public relations industry when it chooses to capitalise on this?

PR Self-Promotion

Where necessary, of course, PR companies will fiercely defend their activities—more so than those of their clients—and will use all the tricks of their trade to attack and denounce their detractors.

In the 19 June 1995 issue of *PR News*, Ron Levy, the then President of the North American Precis Syndicate, questioned whether the intention behind *Toxic Sludge Is Good For You* was more to do with selling copies than with presenting a balanced view of PR. He urged readers to see if the book "(a) says only nasty things about the great PR firms, or (b) presents both sides, including how much good the great PR firms are doing…to save lives, avoid blindness and other health tragedies, and help people get more happiness out of life".[13]


TOXIC SLUDGE IS GOOD FOR YOU!
LIES, DAMN LIES AND THE PUBLIC RELATIONS INDUSTRY
JOHN STAUBER AND SHELDON RAMPTON
INTRODUCTION BY MARK DOWIE
"Terrific! Don't miss it."

Toxic Sludge… co-authors John Stauber and Sheldon Rampton (the then co-editors of the online news journal PRWatch) responded by saying:

"Actually, we *know* this book doesn't tell the 'whole story' about public relations. PR practitioners *are* engaged in promotional and publicity campaigns for clinics, schools and deserving charities that benefit the public. The techniques of public relations are not all inherently bad… But positive uses of PR do not in any way mitigate the undemocratic power of the multi-billion dollar PR industry to manipulate and propagandize on behalf of wealthy special interests, dominating debate, discussion and decision-making."[14]

Disinformation and the Threat to Democracy

In this age of the (dis)information superhighway it is no doubt too late to disentangle the media from their own web; but the concept of a free, independent press is not only considered to be a cornerstone of democracy, it is a fundamental body counted upon to guarantee our freedoms, to expose injustice and corruption, to hold to account those who would seek to violate our civil liberties and rights.

But when journalists, the very people charged with upholding these self-evident truths, are denied the institutional backing and the raw material to do their jobs properly, when PR is presented as the alternative, then, as newspaper proprietor Joseph Pulitzer predicted in his 1904 article in *The North American Review*:

"A cynical, mercenary, demagogic press will produce in time a people as base as itself."[15]

And if that happens, all that will be left won't be fit to print. ∞

About the Author:

Leon Horton is a journalist and writer. After gaining his master's degree at the University of Salford, England, he cut his teeth on local magazines, enjoyed a caretaker stint as the editor of *Old Trafford News* and then

Continued on page 80

Afterlife
EXPLORERS CONFERENCE

BYRON BAY
13 & 14 JAN 2017

AHA members receive 9 CPDs

2 DAYS - 20 SEMINARS - 2 WORKSHOPS

Quantum Consciousness and Near-Death Experiences * Star Kids: The New Human * Dream Visits from the Dead * Time Travel: Parallel Lives and Beyond * A Journey into the Holographic Afterlife * The Soul's Ultimate Gamble: Birth and Adoption * NDE Activations Encoded by the Soul * Earthbound Spirits, Living Orbs, Rescue Work * Eternal Soul Archetype: Your Soul Nature * Soul Mates, Twin Flames and Past Life Connections * Life Between Lives – Igniting Your Soul Connection Here and Now * The Cosmic Dance of Love * Science of Ghost Research * Awakening a New Reality – Becoming the New Human * Life Changing Insights from the Afterlife * Deliberate Creation: What does your Soul want you to Create? * What Is Life - What Is Death - What Is Being Human? ... and so much more! See website!

Discover your Multidimensional Consciousness through Science and Spirituality

Group energy healing with Sound Oracle, Ananara Zolta

PLUS mediumship, group energy transmission, Pandora sessions, meditations, workshops and exhibitors

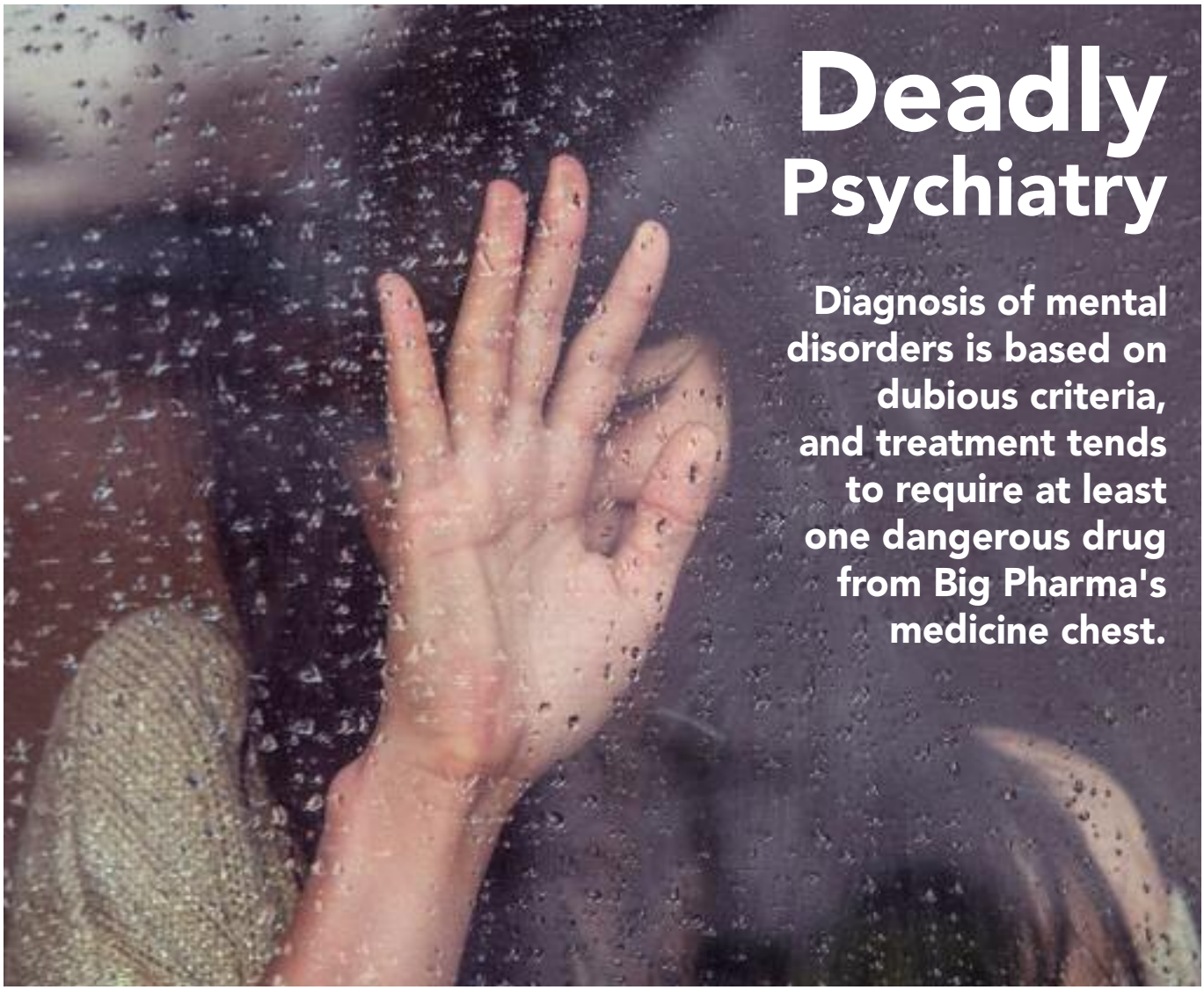
1 & 2 day passes available online -$120p/d www.afterlifeexplorers.com.au

Join Gregg Braden on his return to Australia, February 2017. Presenting: Human by Design! From Evolution By chance To Transformation By Choice

Sydney – Perth – Melbourne
Plus: Visiting Auckland, New Zealand for the first time and sharing the stage with Dr Bruce Lipton

Chris Hooper Promotions

www.ChrisHooper.com.au for more information and registrations



Deadly Psychiatry

Diagnosis of mental disorders is based on dubious criteria, and treatment tends to require at least one dangerous drug from Big Pharma's medicine chest.

(Photo: Milada Vigerova, www.unsplash.com)

An excerpt from *Deadly Psychiatry and Organised Denial* by Peter C. Gøtzsche © 2015

The epidemic of psychotropic prescription drug use is being matched by an alarming increase in ill health and mortality rates.

Truths, Myths and Misconceptions

Psychiatry is not an easy speciality. It requires a lot of patience and understanding, and there are many frustrations. Most patients don't respond to the drugs they receive, and unfortunately the psychiatrists' frustrations at the lack of progress often lead to the prescribing of more drugs or higher doses, further harming the patients. Psychiatric drugs are so harmful that they kill more than half a million people every year among those aged 65 and over in the United States and Europe. This makes psychiatric drugs the third leading cause of death, after heart disease and cancer.

Many psychiatric drugs not only increase total mortality but also increase the risk of suicide and homicide, while

no drug agency anywhere has approved any drug as being effective in *preventing* suicides. (Lithium is an exception, as it might possibly reduce suicides.)

There is huge overdiagnosis of mental disorders; and once you receive a psychiatric diagnosis, everything you do or say becomes suspect as you are now under observation, which means that the initial, perhaps tentative, diagnosis all too easily becomes a self-fulfilling prophecy.

I believe we could reduce our current usage of psychotropic drugs by 98 per cent and at the same time improve people's mental health and survival. The most important reason for the current drug disaster is that leading psychiatrists have allowed the drug industry to corrupt their academic discipline and themselves.

One sign that psychiatry is in deep crisis is that more than half the patients believe that their mental disorder is caused by a chemical imbalance in the brain. They have this misperception from their doctors, which means that more than half the psychiatrists lie to their patients.

Those at the top of the hierarchy I call "silverbacks", since they are almost always males and behave like primate silverbacks in the jungle, keeping others away from absolute power, which in nature carries rewards such as easy access to females. In psychiatry, this translates into money and fame. These silverbacks suffer from collective, organised denial. They refuse to see the damage they cause, even when the evidence is overwhelming. Further, they have united around a number of myths and misconceptions which they defend stubbornly but which are very harmful for patients. Some of the worst include:

- psychiatric diagnoses are reliable;
- giving people a biological or a genetic explanation for their mental disorder reduces stigmatisation;
- the usage of psychiatric drugs reflects the number of people with mental disorders;
- people with mental disorders have a chemical imbalance in their brain and psychiatrists can fix this imbalance with drugs, just as endocrinologists use insulin for diabetes;
- long-term treatment with psychiatric drugs is good, as it prevents recurrence of the disease;
- treatment with antidepressants does not lead to dependence;
- treatment of children and adolescents with antidepressants protects against suicide;
- depression, ADHD and schizophrenia lead to brain damage; and
- drugs can prevent brain damage.

I have come to the conclusion that psychiatric research is predominantly pseudoscience. Reliable research constantly tells us a very different story to the fairy tale that leading psychiatrists want us to believe in.

I am a specialist in internal medicine and took an interest in psychiatry in 2007 when Margrethe Nielsen from the Danish Consumer Council approached me with an idea for her PhD thesis: "Why is history repeating itself? A study on benzodiazepines and antidepressants (SSRIs)". Her studies showed that, indeed, history has repeated itself. We have repeated the same mistakes with the SSRIs [selective serotonin reuptake inhibitors] that we made with benzodiazepines, and before them with barbiturates. We have created a huge epidemic of drug overuse with just as many drug addicts on SSRIs as on benzodiazepines.

Our drug agencies have contributed substantially to the current misery, and most of the drug harms are caused by general practitioners, who prescribe about 90 per cent of the psychiatric drugs.

Margrethe's findings were not welcomed by two of her examiners, who had turfs to defend. One, Steffen Thirstrup, worked for the Danish drug agency; the other, John Sahl Andersen, was a general practitioner. They rejected her thesis for no good reason, but having appealed to the university she defended it successfully.

Unwelcome facts are being suppressed all the time, and [throughout *Deadly Psychiatry and Organised Denial*] I give numerous examples of the works of the "doubt industry" where people incessantly publish seriously flawed research to support their unsustainable ideas.

After having studied the science carefully, I note that some people I have met and several organisations have come to the conclusion that the way we currently use psychiatric drugs and the way we practise psychiatry cause more harm than good. The general public agrees, and feels that antidepressants, antipsychotics, electroshock and admission to a psychiatric ward are more often harmful than beneficial. I have no doubt they are right, and the double-blind, placebo-controlled, randomised trials—which are not as blind as intended—have rather consistently shown that it is the psychiatrists who think their drugs are effective, not the patients.

Investigators who have not been effectively blinded can see the exact opposite of what is actually true when they medicate patients. They see what they want to see,

which is what is convenient for them and for their speciality, not what really happens.

Cochrane reviews have shown that it is doubtful whether antidepressants are effective for depression and whether antipsychotics are effective for schizophrenia. Some drugs can be helpful sometimes for some patients, particularly in the acute phase where a patient can be so tormented by panic or delusions that it can be helpful to dampen the emotions with a tranquilliser. However, unless doctors become much more expert in the way they use psychiatric drugs—which would mean using them very little, in low doses, and always with a plan for tapering them off—our citizens would be far better off if we removed all psychotropic drugs from the market.

What Does it Mean to be Mentally Ill?

If we first take a look at medicine in general, we may better understand the diagnostic problems in psychiatry. We put disease labels on patients with similar problems to make it easier to communicate with each other, to do research, and to treat diseases and prevent them from occurring. These diagnostic labels work best when we know what causes particular diseases. It is very useful to know, for example, that a certain pneumonia is caused by pneumococci, as we may then cure it with penicillin. We therefore subdivide pneumonias according to their aetiology and may even label them this way, e.g., we talk about pneumococcal pneumonia.

There are many different kinds of diagnoses in medicine and some are preliminary and just describe a symptom, e.g., stomach pain, which may become the final diagnosis, if no cause is found, or the final diagnosis could be stomach ulcer. Some diagnoses are syndromes which consist of several symptoms, signs and paraclinical findings (e.g., results of blood tests or radiology).[1]

Rheumatoid arthritis is a good example. We don't know yet what causes it, although we suspect it is an infection. In 1975, a cluster of cases of arthritis occurred in Connecticut, USA, that were later shown to be caused by a bacterium, *Borrelia*, which is tick-borne. Before the aetiology was known, it was a syndrome diagnosis, and the patients could have experienced a rash, headache, fever and other symptoms and signs in addition to the arthritis. We can cure this disease with penicillin and other antibiotics, in contrast to rheumatoid arthritis which is treated with pretty dangerous drugs. Most patients receive non-steroidal anti-inflammatory drugs (NSAIDs) for their pain, and some die because these drugs can cause stomach ulcers and heart attacks. Disease-modifying agents are also dangerous, and drug treatment is therefore an important reason why these patients don't live as long as other people.

The level of understanding of psychiatric diseases is quite low compared to the understanding of disease in the rest of medicine, and the treatments are much more harmful and deadly than those used for rheumatoid arthritis. We don't know much about what causes mental illnesses, and the diagnostic uncertainty is far greater than in other areas of medicine.

One of the things that is part of the syndrome diagnosis of rheumatoid arthritis is the presence of rheumatoid factor in the blood, which is an antibody directed against the person's own tissues. There is no such blood test for a mental disorder, and it hasn't been possible to demonstrate that people suffering from common mental disorders have brains that are different from healthy people's brains.

Scanning electron micrograph of *Borrelia hermsii*, the causative agent of tick-borne relapsing fever, interacting with red blood cells. (Source: US NIAID)

It is not easy to define what we mean by being ill or having a disease, and we are not consistent when we talk about these issues. Quite often, psychiatrists prefer to talk about a mental "disorder", rather than a mental illness or disease, because psychiatric diagnoses are social constructs. However, the staff at the Mayo Clinic in Minnesota, USA, call it an "illness".[2] As we don't know what a mental disease is, we define it as a constellation of symptoms which impair the patient's life.

Psychiatric diagnoses are made by talking to the patients, but the current checklist approach looks a bit too much like the familiar parlour game Find Five Errors. For example, we say that a person who has at least five out of nine possible symptoms is depressed.[3]

If we look hard enough, we will surely find "errors" in most people. The doctor's intuition and experience may suggest in a matter of seconds what the problem is for a particular patient, and there is a considerable risk that the doctor from then on asks leading questions, a situation which yields the required number of error points and leads to a misdiagnosis.

Instead of trying to understand patients, psychiatry has developed into a checklist exercise[4] which one could ask a secretary or the patients themselves to carry out. Psychiatrists have told me that this is what general practitioners often do, after which they make a diagnosis.

A 1993 study in the United States by the RAND Corporation showed:

"Over half the physicians wrote prescriptions after discussing depression with patients for three minutes or less."[5]

Studies have shown that doctors quite often don't use the official checklists but, rather, rely on their hunches about what might be wrong, which increases the risk of misdiagnosis and overdiagnosis even more. Although there are 374 diagnoses in the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition), only half of the people who were in treatment met diagnostic criteria for a disorder.[6]

This is a very unfortunate development. Serious mental illness is often linked to previous traumas, and childhood adversities triple the risk of developing psychosis.[7] If the medical history isn't uncovered—which takes time—the treatments applied will usually be pretty ineffective.

Rosenhan explained that the label was so powerful that many of the pseudopatients' normal behaviours were overlooked entirely or were profoundly misinterpreted by the staff…

On Being Sane in Insane Places

My concerns about how diagnoses are made in psychiatry are not exaggerated. It is one of the major problems in psychiatry, and it can take surprisingly little to receive a diagnosis. It can be risky, for example, if patients mention that they hear voices.

In 1973, psychologist David L. Rosenhan had his now-famous article, "On being sane in insane places"[10], published in *Science*. Rosenhan and seven other healthy people showed up at psychiatric hospitals and said that they heard voices. The task was to get out again by their own devices by convincing the staff that they were sane. As soon as they had been admitted, they ceased to simulate symptoms and behaved completely normally. Yet they were hospitalised for 19 days on average (Rosenhan for two months before he was released), and they were prescribed drugs that they avoided swallowing—a total of nearly 2,100 pills of a wide variety, although the pseudopatients presented with the same "symptom". They were all discharged with a diagnosis of "schizophrenia in remission", although their only "symptom" had been that they heard voices, which normal people can experience.

Many of the real patients suspected that the pseudopatients were sane, but the staff didn't notice the normality. This illustrates an important bias in diagnosis-making. Once a diagnosis is made, it is hard to reverse; it sticks to you. Rosenhan explained that the label was so powerful that many of the pseudopatients' normal behaviours were overlooked entirely or were profoundly misinterpreted by the staff in order to make them fit with a popular theory of the dynamics of a schizophrenic reaction.

The pseudopatients made notes and observed that patient behaviours were often misinterpreted by the staff. When a patient had gone "berserk" because he had been mistreated by an attendant, a nurse rarely asked questions but assumed his upset derived from his pathology or from a recent family visit. The staff never assumed that it could be one of themselves or the structure of the hospital that explained the patient's behaviour.

Rosenhan described how powerlessness was evident everywhere. The patient was deprived of many of his legal rights and was shorn of credibility because of his psychiatric label. The pseudopatients observed abusive behaviour, which was terminated quite abruptly when other staff members were known to be coming. Staff were credible witnesses; the patients were not.

Rosenhan concluded that we cannot distinguish the sane from the insane in psychiatric hospitals. He wonders about how many sane people are not recognised as such in our psychiatric institutions, and whether many patients who might be sane outside the psychiatric hospital seem insane in it because they are responding to a bizarre setting.

Very many people are wrongly diagnosed with schizophrenia. A 1982 study found that two-thirds of 1,023 African Americans with schizophrenia didn't have symptoms necessary for this diagnosis according to current guidelines.[11] In 1985, the chief psychiatrist at Manhattan State Hospital reviewed the records of 89 patients with schizophrenia and concluded that only 16 should have received the diagnosis.[11]

It is not as odd as it might seem that many people are wrongly diagnosed with schizophrenia. Psychiatry is radically different from other areas of medicine, as normal people have similar symptoms and feelings as patients have; it is mostly a matter of degree. Even for schizophrenia, this is the case. Psychosis is not a biological illness like arthritis, and many normal people have psychotic experiences—including delusions and hallucinations—from time to time.

"Let There Be Disorder"

"And DSM said: Let there be disorder."[13]

The DSM-IV of the American Psychiatric Association (APA) tried to define what a mental disorder is. I have highlighted in italics some of the more problematic bits:

"…a *clinically significant behavioral or psychological syndrome or pattern* that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more

important areas of functioning) or with a *significantly increased risk* of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an *expectable and culturally sanctioned response* to a particular event, for example, the death of a loved one. Whatever its original cause, *it must currently be considered* a manifestation of a behavioral, psychological, or biological *dysfunction* in the individual. Neither deviant behavior…nor conflicts that are *primarily* between the individual and society are mental disorders unless the deviance or conflict is a symptom of a *dysfunction* in the individual…"[14]

This definition is extremely elastic and includes many judgements, also with regard to the degree of the phenomena being described. This ambiguity results in large observer variation when independent psychiatrists assess whether a given person has a mental disorder or not, and which one it is.[14, 15]

It is quite impossible to make all this ambiguity and subjectivity operational, and it would be easy to suggest a more meaningful and robust definition. The DSM is a consensus document, however, and its diagnoses are unscientific and arbitrary. Real sciences do not decide on the existence and nature of the phenomena they are dealing with via a show of hands with a vested interest and pharmaceutical industry sponsorship.[16]

The claim that the extensive new diagnostic checklist system introduced in DSM-III in 1980 is reliable has been convincingly refuted in the 1992 book *The Selling of DSM*.[15] The disappointing results from when two psychiatrists evaluated the same people have been buried in a smoke of positive rhetoric in surprisingly short articles, given the importance of the subject. The documentation is hard to find, but the book says it all. Its two authors did a formidable job in casting light on this issue that no one has wanted to debate in the APA. Even the largest study, of 592 people, was disappointing despite the fact that the investigators took great care in training the assessors.[17]

Since we cannot say decisively what a mental disorder is, we could try the accepted diagnostic procedures on healthy people to see whether they also receive psychiatric diagnoses. Indeed they do. I looked up PsychCentral.com, a large website that has been highly praised by neutral observers and has won awards.[18] We were eight normal and successful people who tried the tests for depression, ADHD and mania, and none of us survived all three tests. Two had depression and four had definite, likely or possible ADHD. Seven suffered from mania, one needed immediate treatment, three had moderate to severe mania, and three had milder degrees of mania. My results have been confirmed by others, which suggests that one psychiatric diagnosis or more awaits each of us. It's not surprising that when therapists were asked to use DSM criteria on healthy people, a quarter of them gave a psychiatric diagnosis.[16]

DSM-III from 1980 was replaced in 1994 by DSM-IV, which is even worse than its predecessor and lists 26 per cent more ways to be mentally ill.[16] Allen Frances, chairman of the DSM-IV task force, now believes that the responsibility for defining psychiatric conditions needs to be taken away from the APA, and he argues that new diagnoses are as dangerous as new drugs.[19] He notes that DSM-IV created three false epidemics because the diagnostic criteria were too wide: ADHD, autism and childhood bipolar disorder.

In the United States, one per cent of children up to only four years of age are on psychotropic drugs—although the first three years of life are a period of rapid neurodevelopment[22]—and about a quarter of the children in American summer camps are medicated for ADHD, mood disorder or other mental health problems.[18]

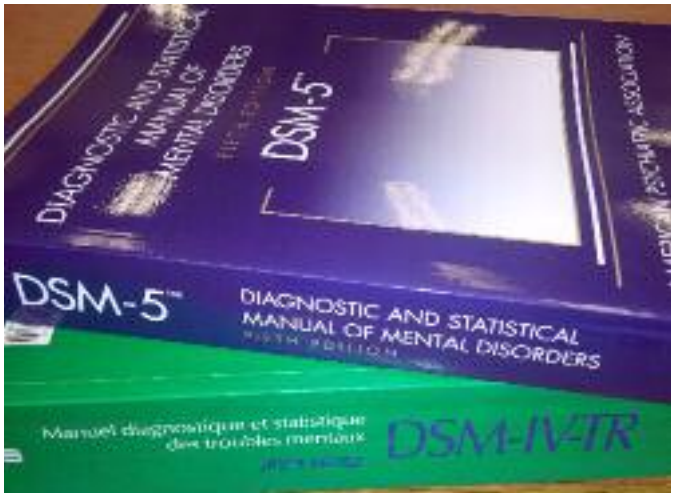
It is psychiatry that has become insane, not our children. Some child psychiatrists brag that they can make an initial assessment of a child and write a prescription in less than 20 minutes, and for some paediatricians it takes only five minutes.[23]

Why is it that leading psychiatrists cannot get enough? Isn't this behaviour so bizarre, abnormal, socially dysfunctional and harmful towards others that, in accordance with the psychiatrists' own way of thinking, it would be legitimate to invent a diagnosis for it? An appropriate name could be "obsessive compulsive disease-mongering disorder" (OCDMD), which could also be short for "obvious common desire of money-making diagnoses". The diagnostic criteria could be a disturbance of at least six months, during which at least five of the following are present:

1. Has been on the industry payroll within the last three years.
2. Is willing to put his or her name on ghost-written manuscripts.
3. Believes that getting a diagnosis cannot hurt.
4. Believes that screening cannot hurt, as the drugs have no side effects.
5. Believes that people with psychiatric disorders have a chemical imbalance in the brain.
6. Tells patients that psychiatric drugs are like insulin for diabetes.
7. Believes that depression and schizophrenia destroy the brain and that drugs prevent this.
8. Believes that antidepressants protect children against suicide.
9. Believes that information from drug companies is useful.

I have come across psychiatrists who have a full house, i.e., for whom all nine criteria apply. I am against forced treatment, but I am in favour of forced *retirement* for doctors who suffer from OCDMD, in order to protect other people from harm.

You may think I am being unfair to psychiatry, but my criteria are actually more reasonable than the criteria in DSM-III for "oppositional defiant disorder" in children.[15]



The DSM criteria are totally subjective and arbitrary, and "often" is part of them all. How often is "often" supposed to be? Many children fulfil all nine criteria, and yet only five are needed for a "diagnosis". For what purpose? As far as I can see, these childhood behaviours are pretty normal.

I am sure that naivety, ignorance and the urge to do good play a role in the silly diagnoses, but there is a darker side to it. Many of those who develop the DSM [the DSM-5 was published in 2013] have heavy conflicts of interest in relation to the drug industry, and creating many diagnoses means money, fame and power for those at the top.[14] It is also about having control over others, which is inherent in our biology. Putting diagnoses on people is a powerful instrument that makes them dependent on what their psychiatrists feel and think, and it leads to abuse. Some psychiatrists cannot even resist the temptation of putting diagnostic labels, such as "paranoid", on their opponents in public debates.

Psychiatric Drugs Lead to Wrong Diagnoses

There are several reasons—but few good ones—why many mental health patients have more than one diagnosis. First, the diagnostic criteria are very broad and highly unspecific for the problems that patients have. Second, there is a lot of overlap between the different diagnostic categories and a propensity for one condition to change into another over time. This is often called "high comorbidity", although the problem is not that the patient has several "diseases" but that the diseases are so vaguely defined. Third, the drugs' side effects are often misinterpreted as new disorders. Prescribing one drug therefore often leads to prescribing other types of drugs in cascade fashion. For example, an antipsychotic may cause the patient to feel lethargic and depressed, which leads to an antidepressant; and if started on an antidepressant, the patient may develop symptoms of mania, which leads to an antipsychotic.[9, 24]

Doctors need to realise that it's impossible to judge whether a patient truly suffers from these additional "illnesses" as long as the patient is under the influence of mind-altering chemicals.[9] The adverse effects can come and go, which is an important reason why people think that these effects cannot be due to the drug.[27] In this way, not only routine treatment but also attempts at withdrawing a drug—which often elicit these side effects—can lead to more diagnoses, more drugs and more harm. Addiction experts know perfectly well that it is futile to diagnose underlying psychiatric disorders when a patient is abusing drugs. Drug abuse and dependence with their cycles of intoxication and withdrawal mimic every possible psychiatric problem. Then why don't psychiatrists abstain from making diagnoses when people are under the influence of those brain-active chemicals that we call "psychiatric drugs"?

A fourth important reason for the far too many diagnoses is that they are often made at the first visit, when the patients may turn up with sadness, stress at work, marital problems, a recent trauma or so much else that many of us will experience from time to time. Doctors tend to forget that the diagnosis is a snapshot, and that the patient might be fine both before and after their visit. Obviously, the more a person visits a doctor, the higher the risk of a false diagnosis.

Doctors should be patient and should try to avoid putting diagnostic labels on people at their first visit. Even when proved wrong later on, diagnoses are almost impossible to get rid of, and they stigmatise people and may have implications for employment, insurance and many other important issues.

Continued on page 82

‘Earthing for Earthlings’

For those that know about earthing, you'll be glad you found us.

For those that don't know about it, you'll be glad you discovered it.

Earthing has proven results and is backed by science.

Earthing

Earthing is being in 'conductive contact' with our planet earth. When we walk bare feet on grass or the beach, we feel good, and we are conducting the earth's free electrons through the soles of our feet.

These free electrons have a negative charge, and act like powerful anti-oxidants (free radical scavengers) & anti-inflammatories. It's a little known fact and a paradigm shift to think that our planet is the biggest anti-oxidants, anti inflammatory known. With the introduction of rubber sole shoes and modern living, we have largely cut ourselves off from the earth's free electrons and healing energy.

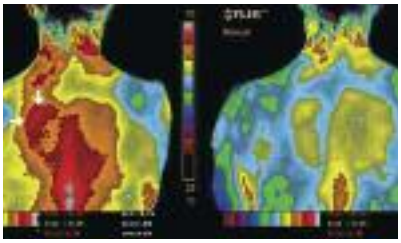
How does Earthing help?

There are over a dozen research papers published in peer review natural & alternative medical journals. Please see our website under Earthing Benefits.

Australia *07 5630 3790*
New Zealand *09 887 0912*
We also have European Distributers

Benefits of Earthing

- Improved blood circulation, and oxygenated blood
- Improved cortisol levels & better sleep, often profoundly better sleep.
- The BIGGEST benefit is reduced inflammation. Inflammation is known medically to be linked to many chronic diseases including Allergies, Alzheimers, Asthma, Cancer, Cardiovascular diseases, CFS, Depression, Diabetes, MS, Psoriasis & Eczema, Stroke, and Post Surgery healing problems.
- Protection from low frequency EMF's (mainly AC electrical EMF's)



Indoor Earthing Bedding & Products for practical living Guaranteed

Most buildings are earthed and our earthing products allow you to earth indoors while you sleep or work. We are a high quality manufacturer and our earthing products are the only ones in Australia and NZ with a written warranty on their effective earthing life. Details regarding the importance of this warranty on our website.

A 1 year Satisfaction Money Back Gaurantee on all our products

Many of our products are made in Australia from our custom made conductive fabric (pure sustainable Tencel, plus the highest quality pure silver coated fibre from France).

We pioneered this high silver earthing underlay sheet which you simply connect to the earth via your regular earthed power points inside using a Better Earthing lead & adaptor supplied. No electricity is used. It's simple - go to bed and earth while you sleep. Wash the silver underlay-sheet each 6 months (the silver is highly anti-bacterial). That's all there is to it. Our Queen size silver sheet costs under 60c a day over the 2 year warranty. After that, it's free.

Enter Code: **YayNexus**

for a complimentary earthing band kit (value $34) when you spend over $100.

Better Earthing
Better Health

BetterEarthing.com.au

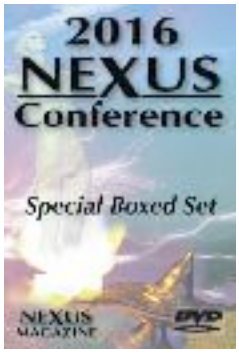
NEXUS Magazine

All back issues of NEXUS Magazine

NEXUS DVD: all back issues of NEXUS from 1987 to November 2016 are included in this DVD in pdf format.

Orders within Australia: AUD$149 which includes GST, postage and handling.

Cost for those ordering outside Australia: AUD$135.45 plus postage.



NEXUS Conference 2016

Gut Health; Scalar Energy and Electromagnetic Protection; Indonesian Ancient Mystery Sites; Giants: The Suppression of Reports and Evidence; Medical Dictatorship: The Ultimate Agenda of the Medical Police State; Parallel and Secret Space Civilisations; Missing Persons Conspiracy: The Cover-Up of Numbers and Causes; Artificial Intelligence and "Black Goo"—Terraforming or Terrifying?; DNA Activation as a Way of Accelerating our Evolution and Awakening; UFOs and Disinformation—the "Be Witness" Fallout; Medicinal Cannabis and Big Pharma in Australia; The Afterlife, Interdimensional Existences and Alternate Realities

In Australia individual DVDs $29; complete set $295 posted
Outside Australia, individual DVDs AUD$26.36 plus postage
Full set outside Australia AUD$268.18 plus postage

Blushield range of EMF solutions for home, travel and office: protection from electromagnetic fields

To see the full range or to order, visit
www.nexusmagazine.com/products/emf-protection

For more information about the gift ideas see ads this issue or go to www.NexusMagazine.com

Christmas Gift Ideas

GIVE A GIFT SUBSCRIPTION

Australia; UK; Europe; USA; Canada; New Zealand; Asia/Pacific; and more countries available.

One and two-year subscriptions available.

www.NexusMagazine.com/subscription/gift-subscriptions

The Art of Close Encounters
by Kim Carlsberg

This work features the author's contributions as well as those from numerous sources about experiences with UFO sightings and interactions with alien entities by direct contact/abduction as well as via dreaming and psychic states. A beautifully illustrated and presented hardcover book.

Airtube headsets

Reduce the radiation during a phone call by eliminating the wire to the in-ear speaker and replacing it with an Airtube. The Airtube stops the induction of magnetic fields from reaching your ear, thus reducing the EMF to your brain and inner ear by 99.9%.

These earbuds have excellent sound quality.

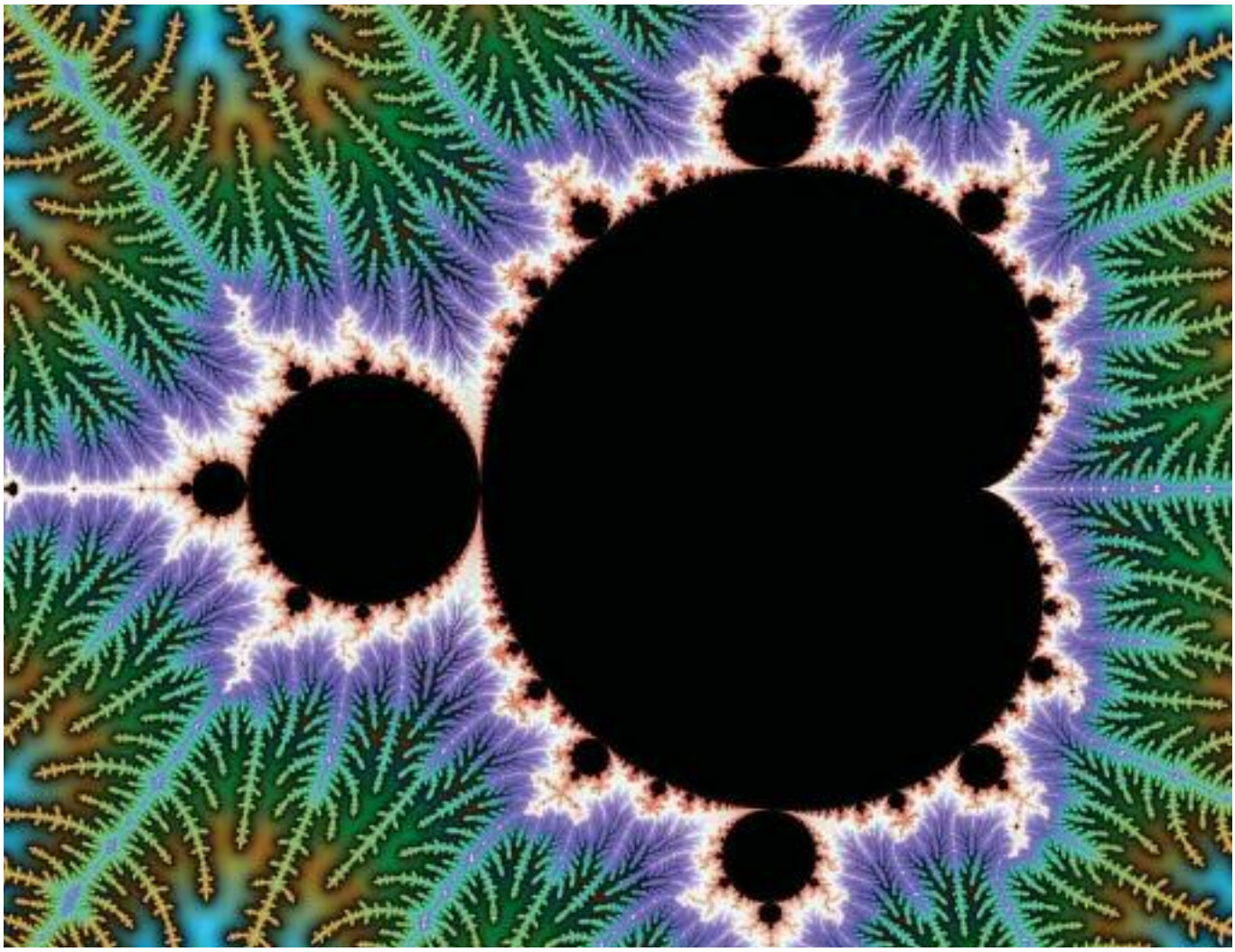
The Airtube Stereo comes with two airtubes for use with mobile phones or other mobile devices. Mono also available.

For more information about the gift ideas see ads this issue or go to www.NexusMagazine.com

FRACTAL GEOMETRY AND THE MANDELBROT SET

by Nigel Lesmoir-Gordon © October 2016

On 1 March 1980 at IBM's Thomas J. Watson Research Center in upstate New York, Benoît Mandelbrot discovered the now iconic Mandelbrot set. With its thrilling visualisations and infinite nature, it brought the world of mathematics back into public consciousness.



This is the Mandelbrot set, one of the most beautiful and remarkable discoveries in the entire history of mathematics. Yet it was discovered as recently as 1980.[1]

– Sir Arthur C. Clarke (1917–2008)

Hidden Beauty Revealed

Science and science-fiction author Arthur C. Clarke called the *Mandelbrot set*, the *M-set*, "one of the seven wonders of the world". In my 1995 film *The Colours of Infinity*, which Clarke presents, he said:

"And no matter how much we magnified it, a million times, a billion times, until the original set was bigger than the entire universe, we would still see new patterns, new images emerging, because the frontier of the M-set is *infinitely* complex. And when I say 'infinitely', I really mean that. Most people when they say 'infinitely', they mean 'Oh, only, oh rather big'. But this is *really infinity*!"

The seeds of this discovery were in fact sown decades before the Mandelbrot set was first seen. In Paris in 1917, two French mathematicians, Gaston Julia, a student of Henri Poincaré, and Pierre Fatou, published papers connected with complex numbers. The results of their endeavours eventually became known as *Julia sets*—although Julia and Fatou never saw a Julia set! They could only guess at them. It would not be until the advent of modern computers that Julia sets could be seen for the first time. It was Benoît's uncle, Szolem Mandelbrojt, who initially directed him to the work of Julia and Fatou.

The world that we live in is not naturally smooth-edged. The real world has been fashioned with rough edges. It's a wiggly world! Smooth surfaces are the exception in nature. Throughout recent human history, mankind has accepted a geometry that only describes shapes rarely—if ever—found in the real world. The geometry of Euclid describes ideal shapes: the sphere, the circle, the cube, the square. Now these shapes do occur in our lives, but they are manufactured and not natural.

Benoît Mandelbrot was a visionary who has given science a new language to describe roughness and the way things really look, feel and sound. Fractal geometry is an entirely new way to study and describe the natural world. The discipline has opened up a host of new directions in science.

Fractals are aesthetically pleasing, frequently revealing stunning beauty in the most subtle ways. The Mandelbrot set defies verbal description. Fractals seem intimately connected to the concepts of beauty and elegance.

Amazingly, until recently, there was no word to describe the familiar shapes of nature. Now we can see that there are fractals everywhere. Now we can view the universe through fractal eyes.

Formative Years: Poland, France and America

Benoît Mandelbrot was born in Warsaw, Poland, on 20 November 1924. He showed an early delight in geometry. He excelled at chess, though he admitted that he didn't think the game through logically; he thought in a geometric fashion. When Benoît was 12, and with the threat of war looming, the family had the foresight to leave Poland and escape to France. When he turned 13, his uncle Szolem was appointed a professor of mathematics at the Collège de France in Paris, proving that a career in this subject was a real possibility. In 1937, Benoît attended the *lycée*; but when Paris fell to the Nazis in 1940, the family fled further south to Tulle.

Professor Benoît Mandelbrot (1924–2010)
(Photo: Nigel Lesmoir-Gordon, 2000)

Benoît went to Lyon for a year of post-high-school study. It was here that he discovered that he had a remarkable and extraordinary visual ability. He found that he could transform a mathematical problem into shapes.

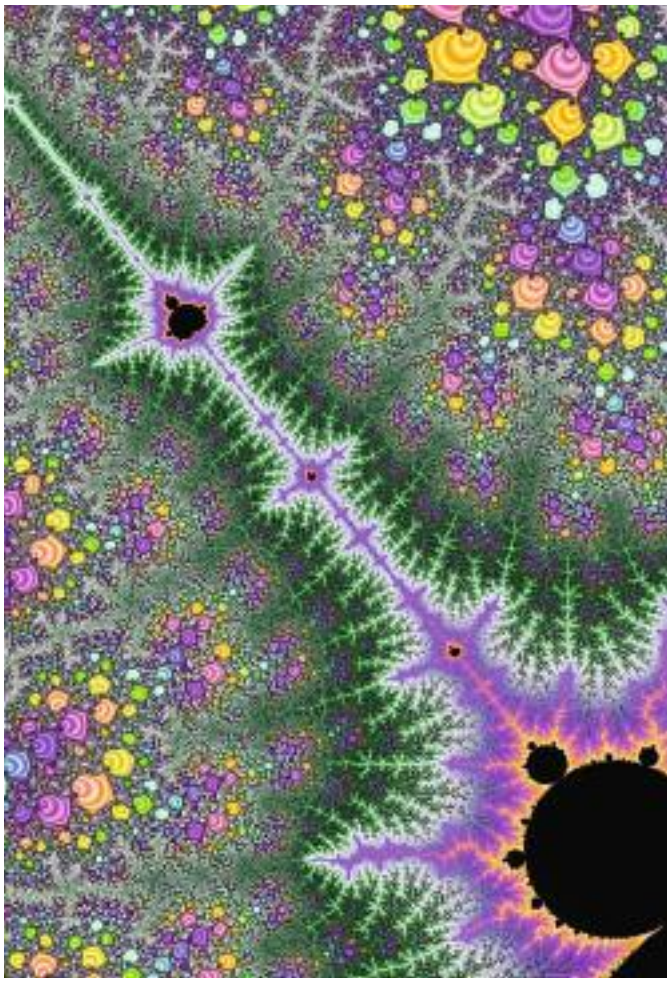
After the liberation of France at the end of World War II, Benoît returned to Paris to prepare for his examinations. Extraordinarily, he ended up passing the entrance exams without the usual two years of preparation! Benoît started to study mathematics at the Ecole Normale Supérieure, which trained university and high-school professors.

But mathematics was dominated then by a group known as the Bourbaki. Ironically, Benoît's uncle Szolem was one of the founders of the movement. The group sought to keep mathematics in the realm of the abstract and separate from real life. They based their ideas on the precepts of Plato.

After Benoît spent just two days at the Ecole Normale Supérieure, something very significant happened. He looked around and asked, "What am I doing here?" He

spent a day agonising and then quit. This was a decision which set in train the path his life was to follow. He had been accepted into the most exclusive school, which would certainly have given him a guaranteed future. The alternative was to go to the Ecole Polytechnique, which had a much less cohesive plan.

When he finished at the Polytechnique, Benoît moved to Caltech in the USA where he studied aeronautics, encountering the daunting complexity of turbulence. After Caltech, he returned to France to study at the University of Paris. He was a disappointed man "because the miracle of finding something special to do in America had not happened". He was looking for a PhD subject, which was not an easy task for Benoît!



When visiting his uncle Szolem, Benoît asked him for something to read on the Métro. Szolem reached into his wastepaper basket and pulled out a document. Benoît recalled that he said, "Somebody sent me this paper, which is crazy, but you like crazy things. So here it is." Benoît took the paper with him. It was on Zipf's law, which became the subject of his thesis.

Once he'd completed his doctorate, Benoît became a lecturer at the University of Lille and then went to the Massachusetts Institute of Technology (MIT) in the USA to focus on information theory. After about six months at MIT, he decided to move on to Princeton's Institute for Advanced Study, where he was sponsored by the mathematician and physicist John von Neumann.

Von Neumann introduced Benoît to the idea of the Hausdorff–Besicovitch dimension—the revelation that there are phenomena that exist outside one-dimensional space but in somewhat fewer than two dimensions. Benoît adopted the Hausdorff–Besicovitch dimension on the spot. It was an almost ubiquitous tool and a special example of the wider concept of fractal dimension that was to come.

Discontinuity in Economics

In 1958, Benoît Mandelbrot went to IBM as a faculty visitor for the summer. It was there that his ideas started to bear fruit and he decided to stay at IBM. The corporation gave him the funding, the facilities, a research team and the mental space in which to work. The powers-that-be at IBM had vision unlike the reactionary management of mainstream academia. It was a gamble, but it paid off. Within three years he had made his first major discovery.

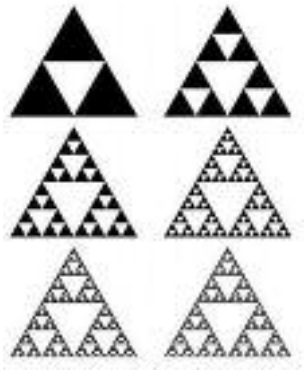
When Benoît was visiting Harvard to give a seminar in economics, his host had a drawing on the blackboard and Benoît asked, "How come you have the same drawing as I'll be using in my lecture?" His host replied, "This drawing is on the behaviour of cotton prices." Benoît decided there and then that cotton prices deserved extremely careful attention. When he got back to IBM, he made a number of tests, and those tests were successful. In a very short time, he had a model for the variations of speculative prices. It was innovative and daring.

Economics, like most of the younger sciences, was attempting to imitate physics. In physics, the motion of a body must be continuous; it can't just jump from one place to another. But economics can be very jagged and irregular and not continuous. In economics, Benoît argued, there's no reason why prices should be continuous. If a piece of news arrives, a share price can go from, say, £100 to £10 or to £3. Benoît accepted the idea of discontinuity in his model of prices and, strangely, that idea had not occurred to anyone else.

Motifs within Motifs

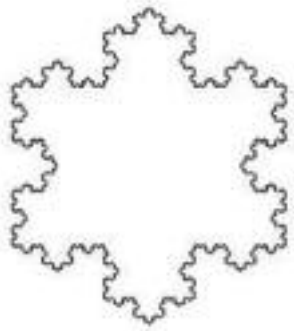
Right at the beginning of Benoît's career at IBM, he tackled a practical issue which directly involved and concerned his employers. Inside the company, data was being lost or corrupted when passing between computers by random noise bursts which they could not get rid of or predict. He used the same tools he had learned as a student and which had been introduced into mathematics in the late 19th and early 20th centuries as being so-called "pathologies".

Objects like the *Cantor set*, the *Koch curve* and, later, the *Sierpinski triangle* and the *Menger sponge* were



The Sierpinski Triangle

The Julia Set



The Koch Curve

known by a few people, but they were mostly pure mathematicians who were convinced that those objects or shapes proved that pure mathematical thought was quite separate from reality because they believed that those ideas had no practical implementation in nature. Benoît found that to be quite the contrary.

Benoît grasped that the noise in the IBM system was deeply embedded in nature and impossible to drive out. He instantly doomed any attempts to predict, suppress or eliminate it. This noise issue was an early and very clear example of the strange logic of fractals—the unruly collection of irregular, geometric phenomena that only Benoît comprehended.

German mathematician Georg Cantor's quest for the meaning of continuity led him in 1883 to the set that is now named after him. It was one of the first fractals to be studied mathematically. Take a line and remove the middle third, leaving two equal lines. Likewise, remove the middle thirds from each of these two lines. Repeat this process an infinite number of times, and you are left with the Cantor set.

The Polish mathematician Vaclav Sierpinski introduced his fractal in 1916. The Sierpinski triangle or gasket is obtained by starting with a filled equilateral triangle, which is then divided into four smaller equilateral triangles, of which the middle one is removed, leaving a triangular space. The three remaining filled equilateral triangles are then divided in exactly the same fashion, so that three smaller triangular spaces appear. Conceptually we can repeat this process indefinitely, at smaller and smaller scales, reaching, in the limit, Sierpinski's gasket.

Austrian mathematician Karl Menger first described what became known as the Menger sponge in 1926. Menger was working in topology and was trying to develop a definition of dimension. It turns out that the sponge, which he created, is in fact a three-dimensional fractal. The sponge has an infinite surface but contains zero volume.

All these shapes are incredibly complicated to describe in Euclidean terms, yet they share an affinity with many shapes of modern mathematics, displaying an endless series of motifs within motifs repeated at all scales.

One such shape is the snowflake curve, devised by Swedish mathematician Helge von Koch in 1904. He defined the curve as the limit of an infinite sequence of increasingly wrinkly curves. The finished Koch curve is infinitely long, despite being contained in a finite area. What von Koch did not realise, however, was that such curves with infinite length would make ideal models for the shapes of the real world, like coastlines and arteries.

The Fractional Dimension

Acting like an 18th-century naturalist, Benoît scoured through forgotten and obscure journals in his quest for insight. Fortunately, he uncovered the work of an eccentric and unremembered mathematician called Lewis Fry Richardson. Benoît had struck a rich seam and he knew it. The library at IBM was discarding books which nobody ever looked at. Benoît was friendly with the librarian, and she regularly told him when a truck was going to come and pick up books for pulping. Benoît would look through them. Most of them were the proceedings of meetings that nobody was at all interested in and were only suitable for pulping. There was one periodical, however, which he opened more or less at random, where he saw the name Lewis Fry Richardson. This name was already known to him through Richardson's work on turbulence in the 1920s.

Richardson was a great hero of Benoît. He was a very strange character. He was a great man in many ways and was a true English eccentric. What really struck Benoît was Richardson's ideas on the lengths of coastlines. What appeared to be a simple question of geography exposed some of the essential features of fractal geometry. The closer you come, the longer the coastline becomes. And that's where the idea of fractional dimension really came alive. Benoît found that his theory worked beautifully with coastlines. He produced a paper titled "How Long is the Coast of Britain?"[2], published in 1967. In 1973, he started to develop an algorithm for creating real-looking coastlines.

In 1975, when Benoît was preparing his first book for publication in France, he knew he needed a name for his creation. One day he was thumbing through his son's

Latin dictionary, idly looking for a word he might adopt. He came across the word *fractus*, meaning "broken", "fractional", "irregular". He coined the word *fractal*. Though the idea of fractals in the form of iteration and self-similarity is an ancient one, it took this wanderer-by-choice to give the idea a name. Once named, the field took off.

Clouds are not spheres, mountains are not cones, coastlines are not circles, and bark is not smooth, nor does lightning travel in a straight line.[3]

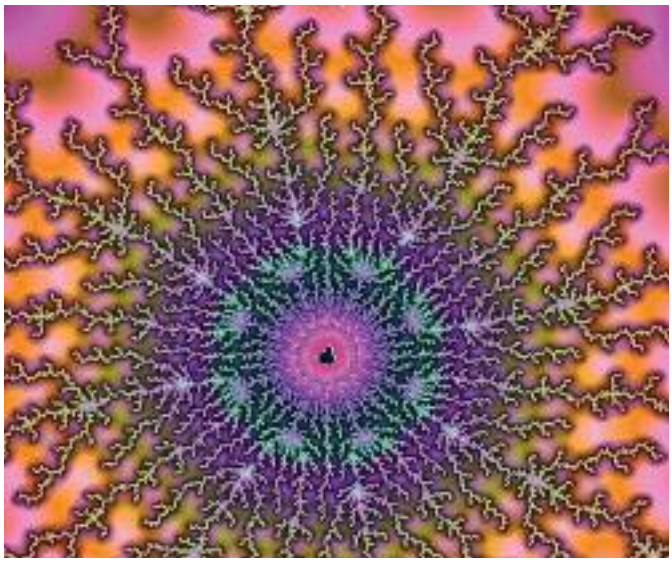
– Benoît B. Mandelbrot

Worlds within Worlds

Fast forward to 1 March 1980 at IBM, when Benoît discovered what is now called the Mandelbrot set. The irony is that Mandelbrot's uncle Szolem had strongly suggested that Benoît look at the papers which Julia and Fatou had published in 1917, with a view to making them the subject of his PhD. Re-examining the maths behind the Julia sets again in 1980 using a computer led Mandelbrot directly to the discovery of the M-set.

During World War I, Julia and Fatou had studied the rational mappings of the complex plane ("*c*"). They had also looked at the process of iteration. Although their work remained largely unknown to most mathematicians, we now know that this was because without modern computer graphics it was almost impossible to communicate their subtle ideas. Self-similarity was also well known to Julia and Fatou. It would not be until the advent of modern computers, though, that Julia sets could be seen in their full glory. Benoît remarked:

"For me, the first step with any difficult mathematical problem was to program it and see what it looked like.



We started programming Julia sets of all kinds. It was extraordinary great fun! And in particular, at one point, we became interested in the simplest possible transformation: *z* goes to *z*-squared plus *c*."

The Julia sets for this mapping depend only on the value of the parameter *c*. When *c* is small, they are simple loops, like wrinkled circles. For large values of *c*, the fractal consists of innumerably many discrete points, spread out and dust-like. When the first picture of the set rolled off the printer, Benoît and his colleagues' first reaction was that there must be some mistake, a fault in the program perhaps. The picture was extremely strange and unexpected.

Over a period of weeks, working late into the night in the basement of a laboratory in Harvard University, Benoît and his assistant explored the astonishing new world they had discovered. By feeding new co-ordinates into their program, they made successively deeper zooms into the boundary of the set. One of the most striking discoveries was that buried deep within the seething froth of the object's boundary were tiny replicas, almost identical to the original set. Zooming further into these baby M-sets, they encountered further variations of these very same patterns with added frills and embellishments. Benoît recalled:

"We made many pictures of it. The first one was very rough. But the very rough pictures were not the answer. Each rough picture asked a question. So we made another picture, another picture. And after a few weeks we had this very strong, overwhelming impression that this was a kind of big bear we had encountered!"

Benoît and his team pushed the computers of the day to their extreme limits to refine their images. The beauty of the set, which revealed itself, was all the more extraordinary and exciting because it was totally unexpected.

There is an interesting parallel here with the equation that almost everybody is familiar with, the only equation that everybody is familiar with, $E = mc^2$, Albert Einstein's equation which states that matter and energy are equivalent to each other. That was a very simple equation but with very far-reaching consequences.

$$z \leftrightarrow z^2 + ci$$

The equation for the Mandelbrot set is equally simple: $z \leftrightarrow z^2 + ci$. In the Mandelbrot equation, the "i" stands for the square root of minus one, and the other letters also stand for numbers, unlike those in Einstein's equation where they stand for physical quantities: energy, mass and a velocity constant. The Mandelbrot set equation numbers are co-ordinates, positions on the plane, defining the location of a spot.

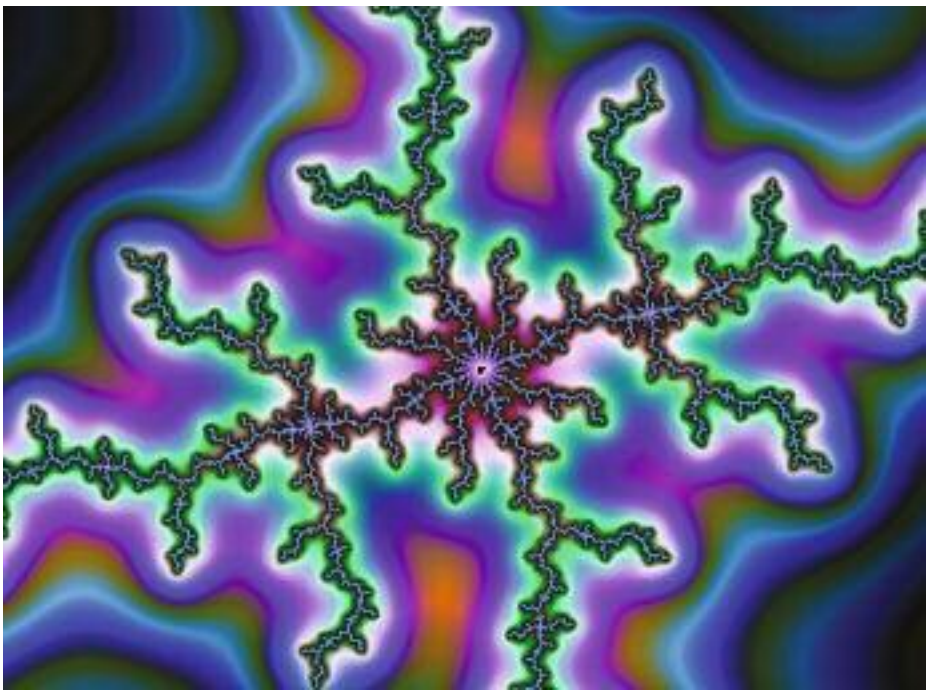
Another difference from Einstein's equation—and a very important one—is the two-way arrow in the middle. It is a kind of two-way traffic sign. The numbers flow in

both directions, constantly feeding back on themselves. This process of going around and around a loop is called *iteration*. It is rather like a dog chasing its own tail: the output of one operation becomes the input of the next, and so on and so on. When the Mandelbrot equation is given a number representing a point and that number is iterated through the equation, one of two things happen: either the number gets bigger and bigger and runs out to infinity, or it shrinks down to zero. Depending on which happens, the computer then knows where to draw a boundary line. So, what is obtained from this basic iteration is a map, dividing this world into two distinct territories. Outside it are all the numbers that have the freedom of infinity. Inside it are the numbers that are "prisoners", trapped and doomed to ultimate extinction.

To paraphrase Clarke, no matter how much we magnify the set, a million times, a billion times, until the original set is bigger than the entire universe, we'll still see new patterns, new images emerging because the frontier of the M-set is infinitely complex.

The Mandelbrot set is the most famous fractal of all. It's not easy to describe it visually. It looks like a man, a cat, a cactus or a cockroach. It has little bits and pieces that remind us of almost anything we can see out in the real world, particularly living things. There is indeed an infinite variety in the Mandelbrot set, just as indeed there is in the world of nature. We see shapes that remind us of elephant trunks, octopus tentacles, sea horses and compound eyes of insects. There is certainly some connection between the Mandelbrot set and the way that nature operates.

The Mandelbrot set is one of the few discoveries of modern mathematics to be assimilated by society as a whole. It has appeared on mugs, T-shirts and record sleeves, in pop videos and even in cinema and television commercials.



Fractals in Nature and Art

When Benoît was exploring this set, he never felt that he had invented it. He never felt that his imagination was rich enough to invent all those extraordinary things. He knew that he was making a discovery.

"They were simply there, even though nobody had ever seen them before. It's marvellous," Benoît said, "that such a very simple formula explains all these very complicated things! So the goal of science is starting with mess to explain by simple formulas. It's the kind of dream of science. And in this case, the dream was implemented in a fantastic fashion."

Though the stunning beauty of the images that the Mandelbrot set generates appeals to us on many levels, the psychological reasons for this appeal are still a mystery. Perhaps there is some structure deep in the human mind that resonates to the patterns in the set. Like the M-set, life is richest on the boundaries between land and sea, between earth and sky. Consciousness and life itself exist at the edge of chaos. Nature often finds the same solution to many different problems—like how to drain water from the land into the oceans, and how to get blood from our hearts to our fingertips and back again. And the templates that nature uses are fractals.

Clouds look the same at all scales. It is impossible to determine the size of a cloud from a photograph of it. Clouds have now been shown to have the same dimension over 10 orders of magnitude, making them the most uniform fractal objects on the planet.

We may expect fractals to be found more often in nature and Euclidean shapes more often in manufacture, but fractal designs have always appeared in architecture, whether for motives of utility or aesthetics or the desire to mimic nature. They can be found in Islamic, Roman, Egyptian, Celtic and Japanese paintings, in carpets and sculptures, and in the works of M. C. Escher, William Latham and Katsushika Hokusai.

In the 1820s–1840s, the Japanese artist Katsushika Hokusai produced marvellous woodblock prints which clearly captured fractal aspects of nature. The woodblock *The Great Wave off Kanagawa*, the first in his *Thirty-Six Views of Mount Fuji* series, is familiar to many. Over his long life, Hokusai observed that nature shows patterns that were then nameless but which we now call self-similar,

The famous woodblock print *The Great Wave off Kanagawa*, published c. 1830–1833, features fractal patterns that artist Katsushika Hokusai saw in nature.

and these are frequently reflected in his work. Hokusai saw these patterns in nature, and to us they certainly look like fractals related to the Mandelbrot set. Perhaps the resemblance to nature accounts for some of our pleasure in seeing mathematical fractals.

Benoît Mandelbrot's Scientific Legacy

Benoît found his most enthusiastic acceptance first among applied scientists working with oil, rock or metals. Fractals have become an organising principle among physicists in the study of polymers and in the design of smartphone antennas. The way that a virus binds to a living molecule relies on the fractal structuring of both components. Fractal geometry is helping in the detection of cancerous cells *in vitro* and has provided the answer to the unusually long incubation period of the human immunodeficiency virus. Fractal growth methods are now used to model marine organisms such as sponges and coral. Scaling is also of interest in the study of vegetative ecosystems and earthquake data, and in the behaviour of density-dependent populations.

Benoît was always willing to do things which others looked down on and dismissed. He had faith in his own insights, and for many years it was not shared. But that did not daunt him. It was not easy to stick to it and persist, but he always held fast to his vision—and that vision has subsequently been wholly justified. Many people might have taken a glancing look at these things, and when they did not yield or when others said it was nonsensical they might have gone on into other things. But not Benoît. He had vision and persistence, and it is those qualities that made all the difference.

Fractal geometry is the language of nature, of the familiar and apparently random forms like trees, coastlines, rivers, lightning, the human body, a winding coastline, the branching structure of a fern, the spacing of stars in the night sky. With fractal geometry, the maverick Benoît Mandelbrot has given us a new language which is applicable throughout all the sciences, and is one which has a mind-opening effect on most people who come across it. This new language is changing our lives and the world of scientific endeavour.

∞

About the Author:

Nigel Lesmoir-Gordon is a British poet, author, novelist, scriptwriter and film director. He formed his first production company, Green Back Films, in 1976, and then Gordon Films UK in 1995. His mathematics-related films include the award-winning documentary *The Colours of Infinity* (1995) on the discovery of the Mandelbrot set, *Is God A Number?* (1999) and *Clouds Are Not Spheres* (2000) again on the life and work of Benoît Mandelbrot. In 2005, he directed, produced and presented an educational DVD, *Mandelbrot's World of Fractals*, for the US National Science Foundation through Yale University.

Nigel is the author of *Introducing Fractals* (2009) and *The Colours of Infinity* (2010), which is based on the film. The heroine of his first novel, the comic thriller *Nothing and Everywhere* (2011), is the beautiful mathematician Susie Bellavista, who uses fractal geometry to solve the mystery of a stolen computer.

Following the death of Benoît Mandelbrot on 14 October 2010, Nigel wrote a tribute for the American Mathematical Society and obituaries for the *Guardian* and the *Independent*. He was also a guest on the BBC Radio 4 program *Last Word*, describing his relationship with the great mathematician. In 2010, he was interviewed by Conscious.TV on "Fractals and Consciousness"; see http://tinyurl.com/jxh8lfb.

Nigel Lesmoir-Gordon can be contacted by email at nigel@gordonfilms.tv. For more information, visit www.gordonfilms.tv and www.gordonbooks.co.uk.

Endnotes

1. Clarke, Arthur C., in *The Colours of Infinity*, film documentary written and directed by Nigel Lesmoir-Gordon, Gordon Films UK, 1995
2. Mandelbrot, B.B., "How Long is the Coast of Britain? Statistical Self-Similarity and Fractional Dimension", *Science* 1967 May 5; 156(3775):636-638, http://tinyurl.com/jg6aylz
3. Mandelbrot, Benoit B., *The Fractal Geometry of Nature*, W.H. Freeman and Company, New York, 1977, 1982 revised edition, p. 1

Note: Other quotations from Benoît Mandelbrot are from interviews conducted by the author.

KNOWLEDGE IS NOT ENOUGH TO FREE US FROM ALL LIMITATIONS

Those of us on the path who are searching for freedom and enlightenment are confronted by much confusing information, such as teachings from past enlightened ones, that are often misinterpreted, and offerings from many other authors who write about their personal experiences and thoughts.

Knowledge itself is not enough to free us from all limitations because it is based on what is learned through the senses, and understanding must come from a higher source within.

In his first book, "One Light", Jon Whistler records the *transmissions* of **Zadore**, which show us the path leading to inner understanding which changes the way we feel and think, freeing us from a life of illusion and suffering.

In '"One Light", there are no mysteries, special symbols, or words. There are no classes or lessons to register for. The transmission are made available to everyone in plain and simple form.

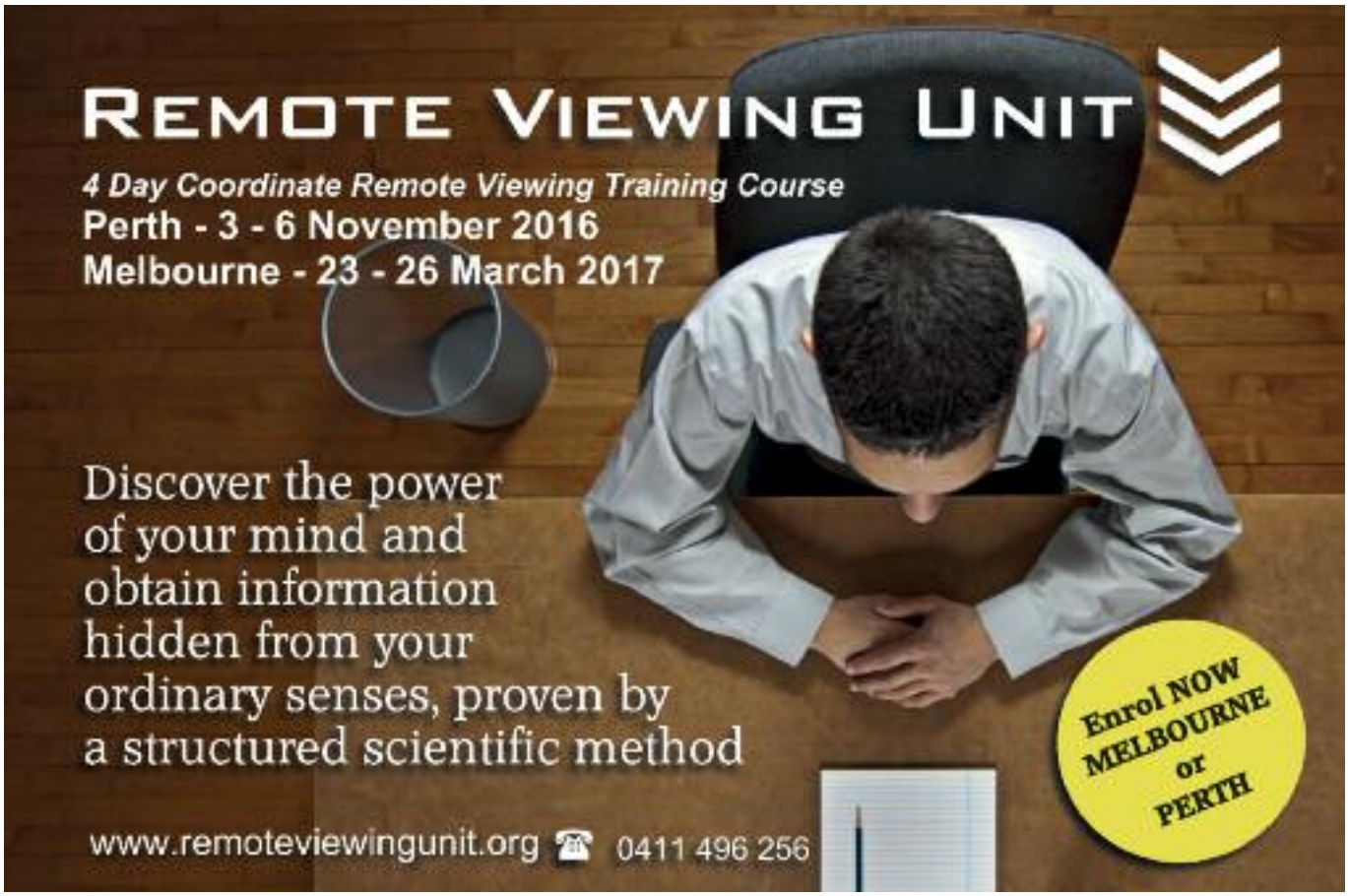
Is this what you've been searching for?

You'll find it has always been deep inside you, waiting to be rediscovered.

One Light
by Jon Whistler

Available in Paperback and eBook Format from:

Light Pulsations
Online Store
www.LightPulsations.com


REMOTE VIEWING UNIT
4 Day Coordinate Remote Viewing Training Course
Perth - 3 - 6 November 2016
Melbourne - 23 - 26 March 2017
Discover the power of your mind and obtain information hidden from your ordinary senses, proven by a structured scientific method
Enrol NOW MELBOURNE or PERTH
www.remoteviewingunit.org ☎ 0411 496 256

SKINNY LOVE HCG
SUMMER SALE!
Homeopathic Weight Loss Drops
Natural - Hormone Free - Safe & Easy
FROM ONLY:
$39*
PER BOTTLE
"23kg's down & maintaining beautifully! This is life changing! Thanks for your support and encouragement & excellent product at an excellent price!" - Karen, Townsville
"I've just lost 30kg's on Skinny Love HCG in 3 months effortlessly & easily, and am keeping that weight off." - Robin, Sunshine Coast
"For me 10kg's gone to goal & holding! So happy with that! Another friend lost 18kg's in 6 weeks!" -Kerry, Noosa
"Hubby and I did one round on Skinny Love HCG and together we lost 26kg! It certainly worked for us!" - Shona, QLD
Nutritionist Recommended!
USE COUPON: NEXUS for 10% DISCOUNT
WWW.SKINNYLOVEHCG.COM
HCG Diet Council MEMBER

Science News

THE UNIVERSE IS A QUANTUM ALGORITHM
Evidence Emerges from the Stock Market

by Ovidiu Racorean © 2016

Recently, quantum gates and quantum circuits have been found when portfolios of stocks were simulated in quantum computation processes, pointing to the existence of a bizarre quantum code beneath stock market transactions. The quantum code of the stock market might prove to have a more profound signification if it is related to the recent finding of quantum codes at the deepest levels of our reality, such as the quantum mechanics of black holes and the spacetime of the universe. Could this mysterious stock market quantum code be a tiny fragment of a quantum code that our universe uses to create physical reality?

Professor John Preskill's talk titled "Is spacetime a quantum error-correcting code?", given in September 2015 at the Center for Quantum Information and Control at the University of New Mexico and in June 2015 at the Kavli Institute for Theoretical Physics at the University of California, may represent a turning point in physical research related to questioning the existence and evolution of our universe. The essence of Preskill's talk may change forever our understanding of the universe, shifting the perspective of physical research from masses and energies to codes of information theory.

John Preskill, the Richard P. Feynman Professor of Theoretical Physics at Caltech, is well known for his remarkable developments of quantum computational models, more specifically topological quantum computing. His lectures have inspired a whole new generation of brilliant physicists working on quantum computation. This experience may point Professor Preskill to knock at the universe's gates with the unique perspective of a quantum code reality.

Is Spacetime a Quantum Error-Correcting Code?

The information theory facet embraced in physical research in recent years may seem bizarre when it comes to understanding the universe, but it makes perfect sense when you listen to Preskill's reasoning on the existence of spacetime as a quantum code.

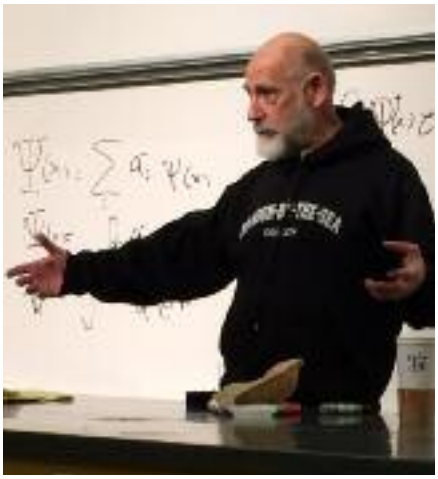
The idea of expressing spacetime as a quantum code is so amazing that it deserves at least a brief non-technical presentation. It relies on two relatively recent ideas in physics: the holographic principle, and quantum error-correction. The holographic principle asserts that all the information contained in a region of space is encoded on the boundary of the region. Quantum error-correction is the foundation for building large-scale quantum computers that can be operated to solve difficult problems.

Based on these two ideas, Fernando Pastawski, Beni Yoshida, Daniel Harlow and John Preskill constructed quantum codes that realise the holographic principle. They built this incredible image of spacetime on the previous work of Almheiri *et al*. and Polchinski *et al*. These researchers had come to an understanding of spacetime as a quantum error-correcting code, yet had not formulated it explicitly.

The Holographic Universe

In a post (since edited) discussing Polchinski's work, string theory physicist Dr Luboš Motl, a former assistant professor at Harvard University, concluded that we are living in a holographic universe that uses quantum computer code to create physical reality. He called it "holographic code".[1]

The holographic universe theory, first proposed by Dutch theoretical physicist Gerard 't Hooft, was given a string-theory interpretation by Leonard Susskind, Professor of Theoretical Physics at Stanford University. Susskind posited that the universe behaves as a hologram and that all the information that constitutes our 3D world is actually encoded on the 2D universe boundaries. Apparently, the universe is a virtual holographic



Professor Leonard Susskind, lecturing at Stanford University in 2013.

Artist's impression of a black hole

reality. The "bad boy of physics", as some American scientists call him, Susskind extended to the whole universe the idea that the information which a black hole contains is lying on its surface event horizon. Black holes may also have something to do with quantum error-correcting codes.

Black Holes and Quantum Error-Correcting Codes

At the historic Hawking Radiation Conference in Stockholm in August 2015, Dr Stephen Hawking enrolled himself once again in the so-called "black holes war". He argued that the boundaries of the black hole hold the information about outside objects trapped inside, though it will be altered and useless when radiated outside the black hole horizon. This presentation caused uproar among researchers.

Hawking's new idea, he told the conference, is that the information doesn't make it inside the black hole at all. Instead, it's permanently encoded in a 2D hologram at the surface of the black hole's event horizon. "The information is not stored in the interior of the black hole as one might expect, but in its boundary—the event horizon…," Hawking said.[2]

The transition of the pole of interest from radiations and particles in the early 20th century to hologram and information theory should be noted here.

The Verlinde brothers took another approach that eventually associated black holes with quantum error-correcting codes. Professor Erik Verlinde, from the University of Amsterdam, and Professor Herman Verlinde, from the Princeton Center for Theoretical Science, use the parallel between black hole radiation and loss of coherence of a quantum computer. This analogy seems fruitful in applying techniques of quantum information theory, such as quantum error-correcting code, to organise the internal state of the black hole.

All these recent theoretical discoveries have certainly revealed that information theory is more important in describing physical reality than had previously been appreciated. The appearance of quantum codes to explain such disparate phenomena of nature may converge with the idea that the physical laws of our reality are encoded in the "lines" of a universe quantum code. Might the entire universe be a giant quantum computer that creates our reality using quantum algorithms?

The Quantum Computational Universe

Seth Lloyd is a professor of mechanical engineering at MIT. He is a distinguished researcher in the field of quantum computation and has co-authored articles with Preskill. Despite his incredibly laborious work in quantum computing, Professor Lloyd is best known for launching the idea of the computational universe.

In his controversial book *Programming the Universe*[3], Lloyd emphasised the idea that the universe is a "giant quantum computer made up of connected quantum gates", as characterised in a review in *American Scientist*.[4] Connected quantum gates are basically describing quantum circuits and quantum algorithms.

In the same register, the remarks of Dr S. James Gates, Jr, a theoretical physics professor at the University of Maryland, should be added here, from the 2011 Isaac Asimov Memorial Debate moderated by the astrophysicist Dr Neil deGrasse Tyson. Gates argued that reality is a code[5], and referred to his paper in *Physics World* (June 2010) where he wrote that researchers should "[t]ry to detect the presence of codes in the laws that describe physics". This is precisely the outcome that physics has come out with in recent years: quantum codes in the description of our universe.

More intriguing, perhaps, is the presence of quantum codes in the representation of a reality totally unrelated to physics: the financial markets. A paper by this author on applying quantum computation to modelling stock price movements suggests, surprisingly, that the stock market itself is a complex quantum algorithm.[6]

Quantum Computation and Financial Markets

To have an advantage over the competition, financial institutions must adopt new scientific ideas and

advanced technologies very early in their development. This is the case with quantum computers.

With the promise of being more powerful and faster than their classical counterparts, quantum computers have captured the attention of financial players lately.

A visionary Canadian venture, D-Wave Systems, introduced to the market the first quantum computer, a product that immediately caught the attention of some important buyers including Google, NASA and Lockheed Martin. D-Waves' quantum computer, which uses the quantum adiabatic theorem at the core of its revolutionary processor, may well lead to major breakthroughs in fields that need to solve complex optimisation problems, such as finance or the search for cancer drugs.

The financial world may benefit from harnessing the power of adiabatic quantum computation to solve portfolio optimisation issues or logistical problems such as the well-known salesman problem.

Briefly, financial problems can be solved in an adiabatic quantum computation by initialising a system of particles into the ground state of a simple Hamiltonian (the operator corresponding to the total energy of the system), and then adiabatically evolving the Hamiltonian to one whose ground state encodes the solution to the problem.

The amazing thing here is that changing the quantum states of tiny particles can solve exclusively human-related problems, such as selecting an optimal portfolio of assets in the financial markets.

Another angle in applying quantum computation to financial markets is in the simulation of stock price movements in portfolios.

The Mysterious Quantum Code of the Stock Market

One of the conventional models of quantum computers, working with quantum gates and quantum circuits, that is the most likely to be built in the near future is the topological quantum computer.

The genuinely bizarre way that a topological quantum computer can realise quantum computation caught the attention of the scientific community in 1997, once Dr Alexei Kitaev had reasoned that topology might solve the error-correction problem of quantum computing.

Topology is concerned with the properties of geometric configurations that are unaltered by deformation. In the same manner, the topological trajectories of theoretical quasi-particles form braids that protect the information against errors caused by local interactions with the environment.

These quasi-particles are called *anyons* and are supposed to be found in the fractional quantum Hall effect. In topological quantum computation, quantum gates are simply implemented by braiding the quasi-particles' trajectories in a predefined sequence.

What do these quasi-particles and braided trajectories have to do with financial markets?

Here's the catch. The time series of portfolio stock prices exhibits the same braiding behaviour as the collection of quasi-particles. From here to the idea of simulating stock price movements in a portfolio according to a quantum simulation is just a small step to take.

The astonishing thing is that, when simulating in a topological quantum computation environment, the time series of stock prices realises elementary quantum gates in their braiding movement. The quantum gates where prices of stocks in a portfolio are realised can be chained in quantum circuits.

It is absolutely fascinating to see how stocks of reputable companies like McDonald's and Walt Disney are literally realising quantum gates in their New York Stock Exchange daily evolution.

By selecting a stock portfolio from the shares of companies listed on the Dow Jones Industrial Average market index, composed of McDonald's Corp. (MCD), The Walt Disney Company (DIS), American Express Company (AXP) and UnitedHealth Group (UNH), an astonishing chain of quantum gates is recovered. The Hadamard gate, the Pauli gates and the S-phase gate are all acting in concert in a one-qubit quantum circuit.

More complex quantum code structures arise when considering increasing the number of stocks in a portfolio. Two-qubit quantum circuits are realised by adding Nike, Inc. (NKE) and The Home Depot

(HD) to the initial portfolio of stocks (see figure 1). By extending the process to the whole Dow Jones Industrial Average market index, the mysterious quantum code of the stock market is revealed.

Here is the link to the quantum computational universe. This strange quantum code lying beneath stock market transactions may be a small fragment of the universal code with which the entire universe acts in accord. This result may point out the shocking conclusion that the New York Stock Exchange is perhaps a quantum computational virtual reality!

It may look hazardous to jump to this conclusion at so early a stage of research related to the existence of quantum codes in the stock market.

It also seems hilarious to link the stock market to black hole evaporation or the holographic universe, but at this point it seems to be the only logical explanation.

At the end of the day, a deeper and more troubling question may arise out of this story: could the trajectories of particles express not only the quantum code beneath stock market transactions but also the hidden code of our entire physical reality? ∞

About the Author:

Ovidiu Racorean received a master's degree in quantitative finance from the Academy of Economic Studies in Bucharest, Romania. His key interest is in applications of mathematics and quantum mechanics formalism to financial markets. He created the term "StockMarketHedron" for the geometric shape associated with stock markets, and his book on the subject was published in 2015. He is a consultant researcher to a London-based hedge fund.

Ovidiu Racorean can be contacted at decontatorul@hotmail.com.

Endnotes

1. Motl, Luboš, "The Reference Frame" (blog), http://tinyurl.com/hdzpeco
2. http://tinyurl.com/qjj2tjv
3. Lloyd, Seth, *Programming the Universe*, Alfred A. Knopf, New York, 2006
4. http://tinyurl.com/za763hu
5. http://tinyurl.com/j3mf7ur
6. Racorean, Ovidiu, "Quantum Gates and Quantum Circuits of Stock Portfolio", 10 July 2015, http://arxiv.org/abs/1507.02310

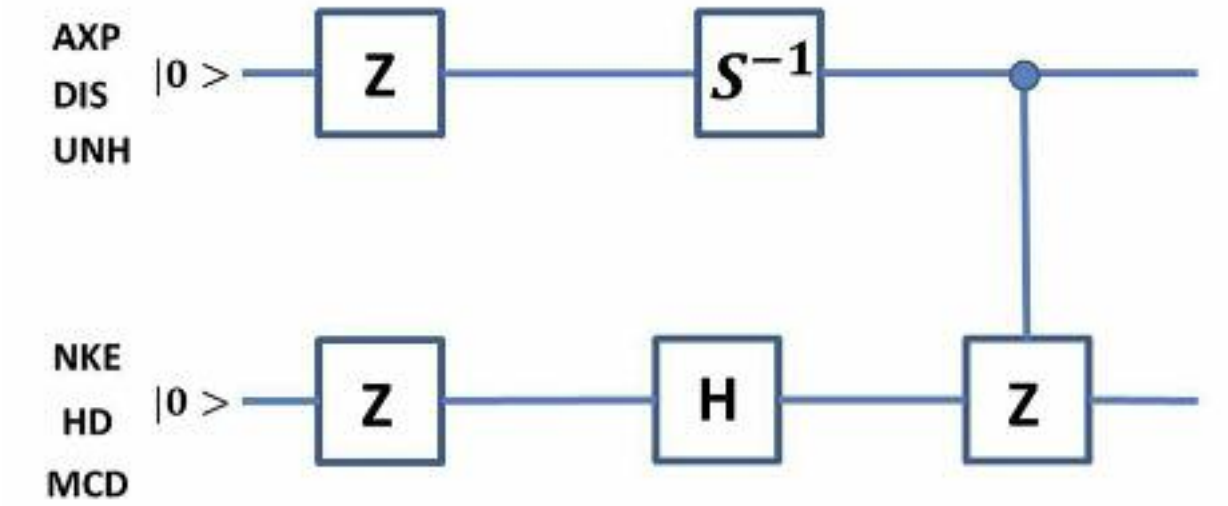
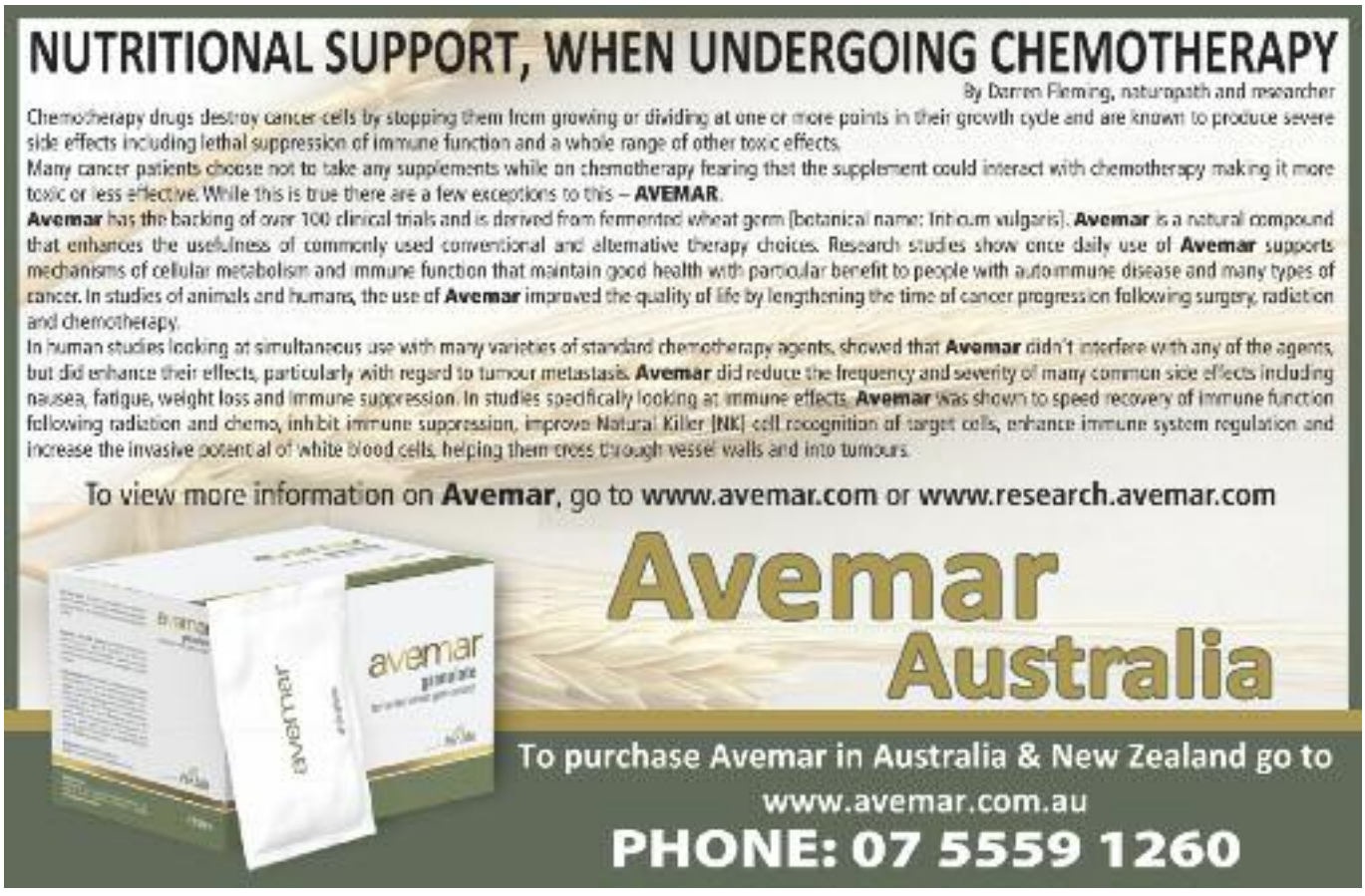


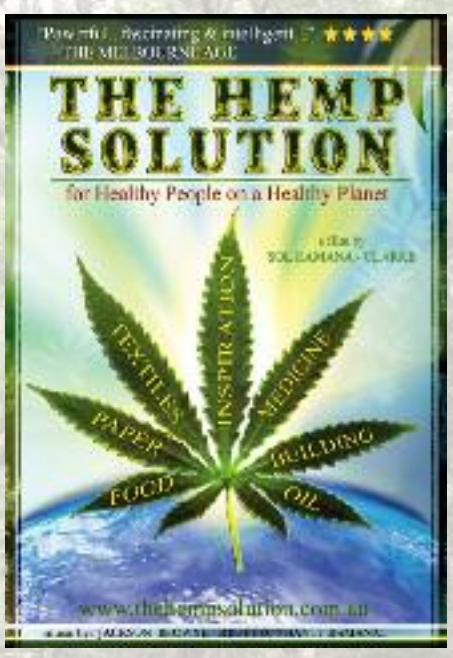
Figure 1: A fragment of the Stock Market Quantum Algorithm realised by a quantum computing simulation of a portfolio composed of stocks from The Walt Disney Company (DIS), Nike, Inc. (NKE), McDonald's Corp. (MCD), American Express Company (AXP), UnitedHealth Group Inc. (UNH) and The Home Depot (HD).

Beautiful glassware
uniquely shaped for revitalisation
NATURE'S DESIGN
Golden Ratio Products
The shape and form of Nature's Design glassware correlates with the dimensions of the Golden Ratio (also known as Sacred Geometry) precisely calculated to generate a silent vibration attuned to the Fibonacci Sequence (major chords): a concept we call "Harmonic Resonance". This resonance influences the vitality of the liquid within - and the environment surrounding the glassware.
Based on concepts of
structured water | harmonic resonance
Discover the amazing properties of this unique glassware and enjoy the benefits of drinking re-energised, structured water!
To view our exciting range, please visit our website:
www.naturesdesign.com.au
BEFORE
AFTER
3 minutes in the Alladin Carafe


NUTRITIONAL SUPPORT, WHEN UNDERGOING CHEMOTHERAPY
By Darren Fleming, naturopath and researcher
Chemotherapy drugs destroy cancer cells by stopping them from growing or dividing at one or more points in their growth cycle and are known to produce severe side effects including lethal suppression of immune function and a whole range of other toxic effects.
Many cancer patients choose not to take any supplements while on chemotherapy fearing that the supplement could interact with chemotherapy making it more toxic or less effective. While this is true there are a few exceptions to this – AVEMAR.
Avemar has the backing of over 100 clinical trials and is derived from fermented wheat germ (botanical name: Triticum vulgaris). Avemar is a natural compound that enhances the usefulness of commonly used conventional and alternative therapy choices. Research studies show once daily use of Avemar supports mechanisms of cellular metabolism and immune function that maintain good health with particular benefit to people with autoimmune disease and many types of cancer. In studies of animals and humans, the use of Avemar improved the quality of life by lengthening the time of cancer progression following surgery, radiation and chemotherapy.
In human studies looking at simultaneous use with many varieties of standard chemotherapy agents, showed that Avemar didn't interfere with any of the agents, but did enhance their effects, particularly with regard to tumour metastasis. Avemar did reduce the frequency and severity of many common side effects including nausea, fatigue, weight loss and immune suppression. In studies specifically looking at immune effects, Avemar was shown to speed recovery of immune function following radiation and chemo, inhibit immune suppression, improve Natural Killer (NK) cell recognition of target cells, enhance immune system regulation and increase the invasive potential of white blood cells, helping them cross through vessel walls and into tumours.
To view more information on Avemar, go to www.avemar.com or www.research.avemar.com
avemar
Avemar
Australia
To purchase Avemar in Australia & New Zealand go to
www.avemar.com.au
PHONE: 07 5559 1260

Elektra®
MAGNESIUM
NEW!
Mg Oil Spritz
REFILL 1 Litre
REDUCE
RECYCLE
REUSE
www.elektramagnesium.com.au
Like
'Elektra Magnesium' on Facebook
FOOD GRADE Magnesium Chloride Hexahydrate to remineralise rain, filtered or distilled water for better hydration and electrolyte charge. Also for magnesium footsoaks and bathing.
Elektra Magnesium Cream for healthy complexion/anti-itch/eczema/dermatitis or in massage for relief of stress, cramps, pain and tension. AUST L183096
10% DISCOUNT For online orders only.
www.elektramagnesium.com.au
Coupon Code: NEXUS0117. Valid to 31/01/17

AWARD-WINNING FILM



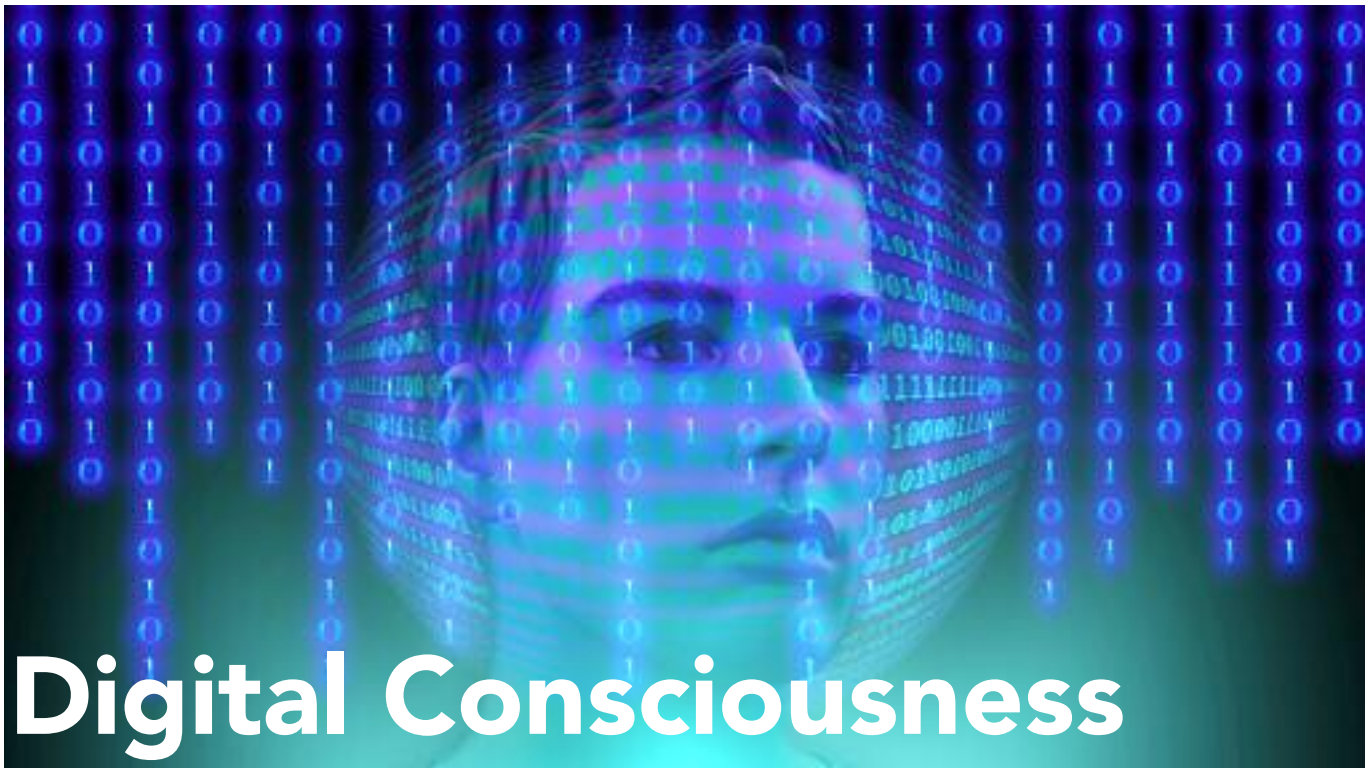
This is the second update of the highly acclaimed documentary "The Hemp Revolution".

The medical section reveals the latest research in THC & CBD's remarkable ability to kill cancer cells, heal many illnesses, and the newly-found role of cannabinoids in balancing every bodily function.

$30 +p&p
($33 includes p&h in Australia)

Order at website:

www.NexusMagazine.com



Digital Consciousness

THE ANSWER TO LIFE'S GREAT MYSTERIES?

by Jim Elvidge © 2016

What If Reality Isn't Really What We Think?

What if our world is just a big video game, like a computer simulation? Possible? Or have some of us watched too many *Matrix* movies? It's actually not as far-fetched as it seems. Within 30 years, we will be able to create virtual environments indistinguishable from our reality. Within a few more decades, even physical realities will be manufactured. And we are marching towards an inevitable merge with machines. In fact, it is nearly impossible to tell whether or not we have already reached that point.

What's more, strong evidence continues to mount that supports the notion that our reality is a digital simulation of sorts. The world's leading scientific research institutes have conclusively demonstrated that an objective physical reality doesn't really exist independently of our consciousness. And it turns out that such a concept explains everything, including age-old philosophical conundrums as well as scientific and metaphysical anomalies that have eluded researchers for centuries. Why does the universe seem finely tuned not only for life but even for its own existence? Is there life after death? What is the purpose of our lives? Rigorous scientific studies demonstrate the reality of paranormal experiences, but what accounts for them? What explains quantum mechanics anomalies like entanglement, the quantum Zeno effect and quantum retrocausality? How does mind over matter work? Believe it or not, Digital Consciousness Theory provides a framework and an explanation for all of the above and much more.

The digital aspect of this idea, known as *digital philosophy* or *digital physics*, is not new and may be

traced to Konrad Zuse's 1969 work *Calculating Space*. Since then, various philosophers (Oxford's Nick Bostrom), scientists (MIT's Ed Fredkin) and writers (Philip K. Dick) have explored such possibilities. Unfortunately, like any emerging idea worth its salt, history has shown (in cave art, Ohm's law, quark theory, cold fusion) that about 30 years must pass before such an idea works its way through to mainstream acceptance.

The fact is that there is zero evidence for a continuous reality. And yet, there's a plethora of evidence for a digital one…

There are two broad yet distinct categories of digital philosophy:

1. A deterministic digital reality;
2. A consciousness-driven digital reality.

In the first case, "we" would merely be artefacts of the complexity of a digital system, effectively watching experience unfold bit by bit with no real free will to control or influence. In the second case, consciousness creates or influences reality.

Research and experimentation that push the boundaries of philosophy and science are increasingly supporting the second view. Let's call it *digital consciousness philosophy*. There are four main tenets of this idea:

1. Consciousness is fundamental and primary;
2. All matter is data and all forces are rules about how data interacts;
3. The reality we experience is illusory, a simulation of sorts, designed for us to learn and to evolve our consciousness;
4. The "system" is digital and consists of the aggregate of all individuated conscious entities plus the virtual reality in which we live, and is driven by a fundamental rule of continuous improvement.

In order to assess the likelihood that our reality works this way, we have to look at two categories of evidence:

1. Evidence that reality is digital;
2. Evidence that consciousness is the prime driver of reality.

As British philosopher Antony Flew said, "go where the evidence leads".[1]

Is Our Reality Digital?

MIT cosmologist and mathematician Max Tegmark observed: "[W]e've never measured anything in physics to more than about sixteen significant digits, and no experiment has been carried out whose outcome depends on the hypothesis that a true continuum exists, or hinges on nature computing something uncomputable."[2] Hence there is no reason to assume, *a priori*, that the world is continuous. In fact, the only evidence that the world is continuous is our high-level macroscopic view of the world, which merely "looks" continuous. But this is not evidence of continuous reality any more than the inference that since we can't see atoms they must not exist. The fact is that there is zero evidence for a continuous reality. And yet, there's a plethora of evidence for a digital one…

A quick clarification of the terms "discrete", "digital", "binary", "analogue" and "continuous" is probably in order:

- discrete – having distinct points of measurement in the time domain;
- digital – having properties that can be encoded into bits;
- binary – encoding that is done with only two digits, zeroes and ones;
- analogue – having continuously variable properties;
- continuous – the time domain is continuous.

In the realm of consciousness-driven digital philosophy, it is my contention that the evidence strongly supports reality as being discrete and digital; that is, time moves on in "chunks" and at each discrete point in time, every property of everything can be perfectly represented digitally. There are no infinities. Many quantum physicists have come to the same conclusion, which I believe to be logical and fundamental. Let's break down the possibilities of the origin of reality and its rules for existence…

Type 1: Our reality was created by some conscious entity and has been following the original rules established by that entity. Of course, we could spend a lifetime defining "conscious" or "entity" but let's try to keep it simple. This scenario could include traditional religious origin theories (e.g., God created Heaven and Earth). It could also include the common simulation scenarios, *à la* Nick Bostrom's Simulation Argument (see below).

Type 2: Our reality was originally created by some conscious entity and has been evolving according to some sort of fundamental evolutionary law ever since.

Type 3: Our reality was not created by some conscious entity, and its existence sprang out of nothing and has been following primordial rules of physics ever since. To explain the fact that our universe is incredibly finely tuned for matter and life, materialist cosmologists dreamed up the idea that we must exist in an infinite set of parallel universes and, via the anthropic principle, the one we live in only appears finely tuned because it has to in order for us to be in it. Occam would be turning over in his grave.

Type 4: Our reality was not created by some particular conscious entity but, rather, has been evolving according to some sort of fundamental evolutionary law from the very beginning.

I would argue that in the first two cases, reality would have to be digital. For if a conscious entity is going to

create a world for us to live in and experience, that conscious entity is clearly highly evolved compared to us. And being so evolved, it would certainly make use of the most efficient means to create a reality. A continuous reality is not only inefficient but is theoretically impossible to create because it involves infinities in the temporal domain as well as any spatial domain or property.

In the fourth case, reality would have to be digital for similar reasons. Even without a conscious entity as a creator, the fundamental evolutionary law would certainly favour a perfectly functional reality that doesn't require infinite resources.

Only in the third case would there be any possibility of a continuous analogue reality. Even then, it is not required—and, as the following categories of evidence show, it would be highly unlikely.

Discrete Quanta

Infinite resolution causes all sorts of breakdowns of known laws of physics, including matter imploding into black holes at sub–Planck scales, which has never been observed. It is also impossible to reconcile general relativity with quantum mechanics. Currently favoured theories of matter and energy (string theory) and solutions to gravity and quantum mechanics (loop quantum gravity) assume a minimal length scale.[3]

Furthermore, evidence supports the notion that quantum states are digital in that spin values are quantised and there are no intermediate states, which is anomalous in a continuous space-time. As renowned physicist John Wheeler concluded, "every physical quantity, every it, derives its ultimate significance from bits, binary yes-or-no indications".[4]

Philosophical Considerations

In his Simulation Argument, Oxford philosopher Nick Bostrom has proposed that it is likely we are living a simulation. This is because we will soon achieve a "post-human" stage in which we create many ancestor simulations, making it more probable that we are in one than in the pre-"post-human" stage. In fact, as he logically concludes, there are three possibilities:[5]

1. We are actually in the pre-"post-human" stage but since the likelihood of that is incredibly small if there is to be a post-human era, then we must destroy ourselves before we get there;
2. Similarly, we are actually in the pre-"post-human" stage but we will consciously choose not to pursue post-human simulations;
3. We are in a post-human simulation.

Possibility no. 2 should be ruled out, given that we never avoid pursuing a technology (e.g., nuclear, nano, cloning) that contains any kind of risk. Simulation technology doesn't even appear to carry much of a risk, making it even less likely that we would consciously decide not to develop it. On the contrary, the fun of fantasy simulations is leading to more and more

advanced massively multiplayer online role-playing games (MMORPGs) while virtual reality technology is enjoying its second boom with the advent of advanced head-mounted virtual reality displays.

Matter as Data

In ancient Greece, Democritus put forth the idea that solid objects were comprised of atoms of that element or material, either jammed tightly together, as in the case of a solid object, or separated by a void (space). These atoms were thought to be little, indivisible, billiard-ball-like objects made of some sort of "stuff". Thinking this through a bit, it was apparent that if atoms were thought to be spherical and they were crammed together in an optimal fashion, then matter was essentially 74 per cent of the space that it takes up, the rest being empty space. So, for example, a solid bar of gold was really only 74 per cent gold "stuff" at most.

That view of matter was resurrected by John Dalton in the early 1800s and revised once J. J. Thomson had discovered electrons. At that point, atoms were thought to look like plum pudding, with electrons embedded in the proton pudding.

Still, the density of "stuff" didn't change, at least until the early 1900s when Ernest Rutherford determined that atoms were actually composed of a dense nucleus and a shell of electrons. Further measurements revealed that these subatomic particles (protons, electrons and, later, neutrons) were really very tiny compared to the overall atom and that, in fact, most of the atom was empty space. That model, coupled with a realisation that atoms in a solid actually had to have some distance between them, completely changed our view on how dense matter was. It turned out that in our gold bar, only one part in 10^{15} was "stuff".

That was, at least, until the mid-1960s when quark theory was proposed, which said that protons and neutrons were actually comprised of three quarks each. As the theory is now fairly well accepted and some

measurement estimates have been made of quark sizes, one can calculate that since quarks are between a thousand and a million times smaller than the subatomic particles that they make up, matter is now 10^9 to 10^{18} times more tenuous than previously thought. Hence our gold bar is now only about one part in 10^{30} (give or take a few orders of magnitude) "stuff" and the rest is empty space. By way of comparison, about 10^{32} grains of sand would fit inside the Earth. So, matter is roughly as dense with "stuff" as one grain of sand is to our entire planet.

And now, of course, we have string theory, which says that all subatomic particles are really just bits of string vibrating at specific frequencies, each string possibly having a width of the Planck length. If so, that would make subatomic particles all but 10^{-38} empty space, leaving our gold bar with just one part in 10^{52} of "stuff".

Gets kind of ridiculous, doesn't it? Doesn't anyone see where this is headed?

In fact, if particles are comprised of strings, why do we even need the idea of "stuff"? Isn't it enough to define the different types of matter by the single number—the frequency at which the string vibrates?

What is matter anyway? It is a number assigned to a type of object that has to do with how that object behaves in a gravitational field. In other words, it is just *information*.

We don't really experience matter. What we experience is electromagnetic radiation, influenced by some object that we call matter (visual), and the effect of the electromagnetic force rule due to the repulsion of charges between the electron shells of the atoms in our fingers and the electron shells of the atoms in the object (tactile). In other words, *rules*.

In any case, if you extrapolate our scientific progress by plotting the evolution of the theoretical density of matter (see below), it is easy to see that the ratio of actual physical "stuff" to the space it consumes is trending towards zero as we discover more about its structure.

This implies that matter is ultimately most likely just data, and the forces that cause us to experience matter the way we do may simply be rules about how data interacts with itself. It is also striking that equations for thermodynamic and informational entropy both have the same form, lending further support to the idea that matter/energy is information.

Equations Creating Reality

Normally we think of mathematical equations as being tools that help us empirically describe the behaviour that we see in the natural world. But is there any evidence that our world is created from algorithms or equations? To cite one of many such examples, it has been shown that the negative frequency solutions to Maxwell's equations actually reveal themselves in components of light.[6] Were our reality what it appears to be, solutions to equations should only make sense in the context of describing reality. However, in some cases it seems to be the other way around. Data and rules don't manifest from the reality; they *create* the reality.

Quantum Mechanics and the Similarity of Reality to Computational System Design

It takes an infinite amount of resources to create a continuous reality, but a finite amount to create a quantised one. The very nature of the computational mechanisms of a digital computer is essentially the same as a discrete interpretation of quantum mechanics—a sequence of states, with nothing existing or happening between the states. The resolution of any program is analogous to the spatial resolution of our reality, just at a different level.

Many researchers have also noted that a simulation model solves the "prime mover" philosophical problem. While the Big Bang theory implies a universe that arises from nothing, which has no grounding in objective reality, a virtual reality can easily "boot up" from an external context.

Is Consciousness The Prime Driver Of Reality?

The nature of consciousness is the second category of evidence that we need to consider for this comprehensive approach to reality and the understanding of all that there is. As with digital reality, the evidence is strong that consciousness is separate from the brain and therefore a driving force behind our world rather than an emergent property. It also implies something profoundly significant that takes us into the realm of philosophy as opposed to physics; that is, that there exists a transcendent evolutionary system.

The Observer Effect

The *observer effect*, and the experiments that demonstrate it, may prove to be the smoking gun of digital consciousness philosophy. The root of this evidence goes back to Thomas Young's double-slit experiment in 1801, in which he attempted to settle the question on whether the nature of light is based on waves or particles. With somewhat coherent light passing through two slits in a barrier, the resulting interference

pattern that formed on the photoelectric screen behind the barrier seemed to demonstrate that light is indeed a waveform.

However, in the early 1900s, with Einstein's work on the photoelectric effect (for which Einstein received the Nobel Prize in Physics in 1921), it was shown that light sometimes does behave like particles in that it interacts with matter in discrete quanta of energy, which were later dubbed "photons". This became known as the *wave–particle duality* nature of light. Sometimes light behaves like waves and sometimes it behaves like particles; or, rather, it has both properties all the time, but which "face" of light is observed depends on the nature of the experiment or the measuring equipment. As it turns out, electrons and other subatomic particles also behave both like waveforms and particles, depending on the observation.

Successively complex double-slit experiments have teased out even more fascinating and surprising results. For example, it has been determined that an electron shot at the screen actually goes through *both* slits at the same time. This is called *quantum superposition*. According to the most commonly held view of what is actually going on under the covers, the electron really exists only in a "probability" space of potential positions. The act of measuring which slit it actually goes through causes this probability function to "collapse" into reality, and the electron then takes a definitive position. The outcome of the experiment suddenly changes to what it would be if the electrons were only particles, and the screen shows no interference pattern. In other words, the very act of consciously observing causes a change in the outcome of the experiment. This is known as the observer effect, and it has baffled scientists for decades.

Most scientists try to fit the observer effect into their preconceived view of reality—namely, *objective materialism*—by invoking arguments like hidden variables and measurement equipment interference. But, one by one, each argument has been soundly refuted. The world appears not to exist until consciously observed, at least not at the microscopic level. The Institute for Quantum Optics and Quantum Information (IQOQ) in Austria upped the ante in terms of precision in 2008 by showing that objective reality doesn't exist to a certainty of 80 orders of magnitude (that is, the probability of being false due to error or chance is 10^{-80}).[7] That's good enough for me.

But what's going on?

In 2012, Dean Radin conducted what appear to be well-designed and rigorous scientific experiments that show to a high probability that conscious intent can directly alter the results of the double-slit experiment.

Digital consciousness theory provides a straightforward explanation for the observer effect:

1. Electrons, along with photons, all other particles and ultimately everything, are really nothing but information. That information describes how the electron (for example) will behave under all circumstances, what probabilities it will travel in any particular direction and how it will reveal its presence to our senses. That information plus the rules of reality fully determine how the electron can appear sometimes like a particle and sometimes like a wave because it is really neither—it is *just* information that is used to give us the sensory impression of one of those personalities under various circumstances.

2. The Great Cosmic Program that appears to control our reality is also fully aware of the state of consciousness of every free-willed observer in our reality. As a result, the behaviour exhibited by an electron under observation can easily be made to be a function of the observation being made.

Given these two concepts, the observer effect and its cousin, *quantum entanglement*, are practical requirements of digital consciousness theory. Consider viewing the problem in the reverse manner. If one were to design a universe-simulating program, what kinds of curiosities might result from an efficient design?

If I were to create such a program, for instance, I would probably model data in a dynamically efficient manner. For example, for any space unobserved by a conscious entity, there is no sense in creating the reality for that space in advance. It would unnecessarily consume too many resources.

Instead, an efficient program would dynamically generate incremental resolutions of various components as needed, such as when an object is put under a microscope.

Extending this concept to the quantum level, once a subatomic particle is observed the program must then establish properties for that particle, effectively resulting in the collapse of the probability wave function. Moreover, the complete behaviour of the particle, at that point, might be forever under control of the program, like a finite-state machine. After all, why delete the model once observed, in the likely event that it will be observed again at some point in the future? Thus, an efficient

process of "zooming in" on reality in the program would result in exactly the type of behaviour observed by quantum physicists, fully explaining the observer effect as well as quantum entanglement. But, while the observer effect may be the smoking gun of idealism, there are many other categories of evidence that lend support to the digital consciousness model of reality.

Near-Death Experiences

Hundreds of research papers and dozens of books by reputable scientists and doctors[8, 9, 10, 11] comprise evidence that near-death experiences (NDEs) cannot be artefacts of a dying brain but, rather, are real conscious experiences outside of our normal physical reality. Non-traumatic NDEs, shared-death experiences and experiences with highly corroborative artefacts demonstrate conclusively what traditional theories of brain function cannot explain: that consciousness is not an emergent property of brain function.

Past Lives

Researchers and psychiatrists such as Ian Stevenson have studied thousands of cases of children with past-life recollections and adults who have recollections under hypnosis. In many cases, special skills, languages, phobias, corroborating artefacts and/or knowledge of people and places appear to be inexplicable without invoking reincarnation. Even in a 1975 *JAMA* article it was admitted that some of Stevenson's cases are "difficult to explain on any other grounds [other than reincarnation]".[12]

Paranormal Phenomena

Rigorous analysis of thousands of experiments demonstrates that subtle paranormal phenomena are real effects that cannot be explained without invoking unknown communication mechanisms.

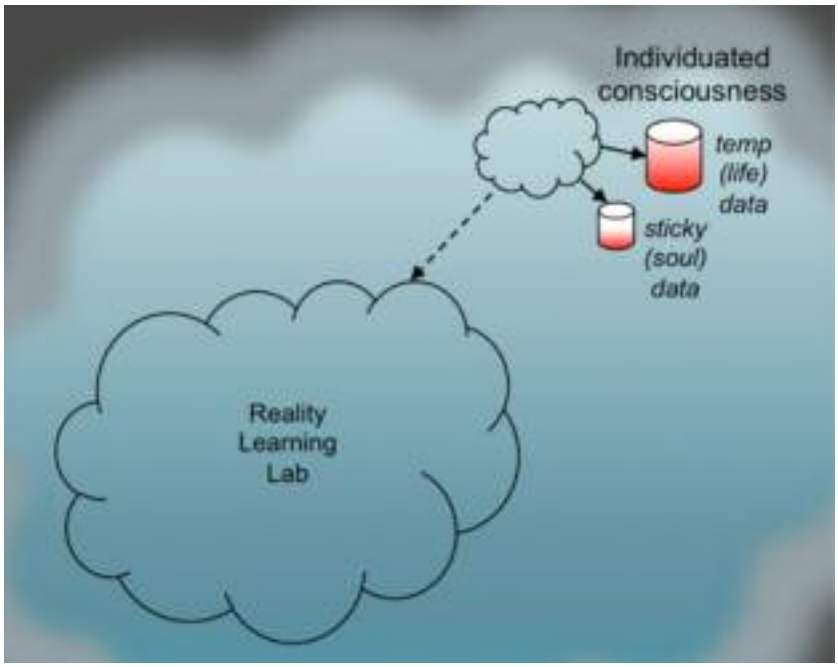
For example, the odds of all ganzfeld (telepathy) studies (consisting of over 2,500 sessions) generating the subtle yet statistically significant telepathic effects that they did has been calculated to be about 10,000,000,000,000,000 to one against chance.[13] The odds of Daryl Bem's precognition studies at Cornell University generating the subtle yet statistically significant precognitive effects that they did has been calculated at over 1,000,000 to one against chance.[14] And the odds of Princeton's PEAR Lab clairvoyance studies (which validated Stanford Research Institute's remote-viewing studies) generating the effects that they did has been calculated at about 33,000,000 to one against chance.[15]

Yet, rather than necessitating new fields and theories to explain every different type of phenomenon, a simple digital consciousness–oriented model provides a framework for all anomalous experiences.

How Does All Of This Work?

The digital consciousness model has a comprehensive and perfectly consistent explanation that accounts for not only the observer effect but every other known metaphysical and scientific anomaly from UFOs to the quantum Zeno effect.

A model of our reality is shown below. (Note: this has the same foundation as Thomas Campbell's "My Big TOE [Theory of Everything]".[16]) "We" are each a segment of organised information in All That There Is (ATTI). Hence, we feel individual but are connected to the whole. (Now is not the time to dive into how perfectly this syncs with virtually every spiritual experience throughout history, but readers probably recognise this.) The Reality Learning Lab (RLL)[17] is a different set of organised information within ATTI. The RLL is what we experience every day while conscious. It is what some call "the universe" (while meditating or in deep sleep, we are connected elsewhere). It is where all of the artefacts representing



our reality exist. It is where various "simulation" timelines run. The information that represents our memories is in three places:

1. The "brain" part of the simulation. Think of this as our cache.
2. The temporary part of our soul's record (or use the term "spirit", "essence", "consciousness", "being" or whatever you prefer—words don't matter), which we lose when we die. This is the stuff that our "brain" has full access to, especially when our mind is quiet.
3. The permanent (or "sticky") part of our soul's record: what we retain from life to life, what we are here to evolve and improve, what in turn contributes to the inexorable evolution of ATTI. Values and morality are here.

Since we are each living our own purely subjective experience, it is easy to see how we collectively create

our own reality and how the observer effect suddenly makes sense. It is the high degree of consensus between each of our subjective experiences at the macroscopic level that makes our reality seem so "solid". But we clearly have the ability to influence our experiential reality, as demonstrated by the power of intent and the placebo effect.

Paranormal experiences are simply data transfers between our individuated conscious entities (e.g., telepathy) or between conscious entities and some artefact in the RLL (e.g., clairvoyance) that appears distant in the apparent physical reality. It is of course obvious that our reality must be finely tuned for existence and for life. The RLL may have got that way either through design or via a continuous improvement pattern that is built into the core nature of reality.

Why Does All Of This Matter?

If, as the evidence appears to imply, we live in a consciousness-driven digital reality, the implications are actually significant.

Explanatory Power

As I hinted at above, the huge set of well-studied anomalies facing us in fields as varied as physics, philosophy, geology, anthropology, metaphysics and psychology can all be explained only by a consciousness-driven digital reality model. This includes quantum mechanical anomalies, nature versus nurture in anomalous identical-twin studies, the evening effect of society, the finely tuned universe, paranormal experiences, life after death experiences, and more. No other theory has that explanatory capacity.[18]

Immortality

External consciousness implies an existence beyond corporeal death. Experiences by research scientists such as Thomas Campbell and Eben Alexander indicate that this existence is lasting, effectively immortal. Imagine how that would change decisions and priorities made here on Earth. All of the money and efforts towards life extension may be redirected towards life itself. The medical industry might recognise that extending our life expectancy is not an evolutionary directive.

Knowing of an immortal consciousness, we may instead focus on curing diseases and improving the overall quality of life rather than viewing people's health as a profitable maintenance plan that extends life beyond a comfortable limit.

Purpose

Digital consciousness philosophy imbues life with a great deal more meaning and purpose than does scientific materialism. This can give us a new perspective on the meaning of our individual lives. Instead of focusing our efforts on winning a hedonistic survival game based on fear and the scarcity of resources, we can recognise that our purpose to learn and evolve our consciousness might lead to significantly greater generosity to fellow humans and true respect for other species on our planet.

When the theoretical game Prisoner's Dilemma is played in an infinitely iterated mode, cooperative techniques optimise the outcome.[19] Applying this lesson to an iterative life process, we would expect to see behavioural differences that result in an overall improvement in the quality of humanity as a whole versus a focus on self-interest.

Priorities

The increasing human population rapidly takes away and destroys habitats for countless species of other conscious life-forms, and also uses them for cruel experimental medical research. Recognition that animal consciousness is rooted in the same system that begets human consciousness would most certainly serve to eliminate such cruelty and exploitation.

The materialist view implies that we are in constant competition for resources, thereby driving conflicts that cause war. But given the knowledge that we are all interconnected, would wars between groups of people based on differences in dogmatic religious beliefs, arbitrary geographical boundaries or political systems make sense any more?

Power of Intent

The digital nature of consciousness implies a probabilistic system (as evidenced clearly in quantum mechanics) which generates outcomes that can be influenced by intent. The belief that "skilful intention" can change your life, your society and your world could allow people to get out of their belief traps and actually make a difference.

Summary

As the evidence that we exist in a consciousness-driven digital reality continues to mount, so will humanity's collective belief in the idea.

The understanding of this model of our world can lead to new, unifying understandings in science, but more importantly to a more peaceful, harmonious, just and balanced world-view. ∞

About the Author:
Jim Elvidge received a master's degree in electrical engineering from Cornell University in 1981, with a specialisation in digital signal processing. His professional career has been mostly in high-tech industry, where he has held a variety of engineering and senior management positions. He was also responsible for a number of entrepreneurial ventures, including

Continued on page 80

Motto Rheuma Patches

are adhesive pain relief patches impregnated with a mineral compound. When the patch comes into contact with the skin, the moisture in the skin closes the circuit between the Motto patch and the body.

- **Easy to use** - Simply cut to the size you need and stick it on your pain.
- **Targeted** - Apply the patch directly to the painful area.
- **Drug free** - The mineral compound in the patch prompts a bio-current response from the body which results in pain relief.
- **Effective** - Most people experience relief between 10 minutes and 2 hours.
- **Long lasting** - Up to 10 days for one application.
- **Water resistant** - Can be worn while showering, swimming or other water activities.
- **Portable** - Fits easily into your wallet or purse.
- **Versatile** - Multiple patches can be applied at the same time.

The adhesive in the patch does contain **LATEX** which may cause a skin reaction for some people. If irritation occurs remove the patch.
Note - Always read the label and use as directed. If symptoms persist contact your doctor or health professional.

At **Bio Circuitry** we sell and use a range of products which provide pain relief and promote wellbeing.
Motto Rheuma Patch and
SCENAR Technology Devices for **pain relief**,
Floww Health Technology and the
Recovery Blankets to **support overall wellbeing**
All are easy to use and drug free. They interact with the body's electrical system in various ways to produce their effect.
Contact us now on
0403 794 332, 02 8007 5160
or
office@biocircuitry.com.au
for further information, or visit our website:
www.biocircuitry.com.au
for information and pricing

Bio Circuitry
Improving Wellbeing

SIS MACHINES
SILVER IONTOPHORESIS STIMULATORS

ANTIBIOTICS AND ANTIVIRALS REPLACEMENT

FAST INFECTION TREATMENT

Effective for bacterial, viral, superbug, acute, chronic and hard-to-reach infections.

Targeted Constant-Current delivery of silver ions to the surface or internal infection.

Connects to silver-nylon iontophoresis electrodes for placement anywhere on the body. Easy and quick to apply.

BIOELECTRIC WOUND HEALING

For all infected and non-healing wounds, diabetic ulcers and internal scar tissue.

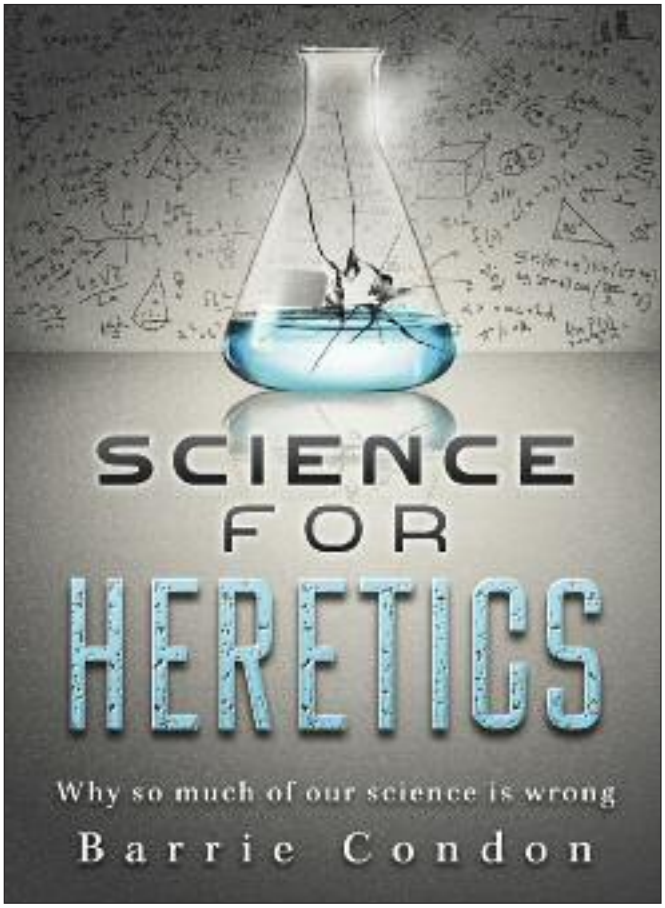
Stops infection. Reduces pain. Replaces or boosts the wound-generated electric field that controls all wound healing.

Modifies injured tissue cells to stem cells for tissue regeneration.

10% discount for Nexus readers. Enter coupon: NEXUS

Email contact@sismachine.com for FREE Vol. 23, No. 5 Nexus article

SIS
NEXT GENERATION CLINICALLY DEVELOPED MEDICAL GRADE DEVICES
SISELECTROMED.COM
A development of the inventions of Dr Robert O Becker.



Strange Times...

UFOs IN WIKILEAKED PODESTA EMAILS REVEAL URGE FOR DISCLOSURE

by Linda Moulton Howe © 2016

On Sunday 16 October 2016, the *Washington Times* ran an article headlined "Leaked Podesta emails encourage UFO buffs seeking declassification in a Clinton administration".

By then, Julian Assange's WikiLeaks had released thousands of hacked emails addressed to John Podesta, Chairman of the 2016 Hillary Clinton presidential campaign, including several about finally opening up the government's UFO and ET files.

John Podesta served as Chief of Staff in the second Bill Clinton administration. In 2003, Podesta founded the Center for American Progress, a liberal think-tank in Washington, DC. Later, he was White House Counselor to President Barack Obama, overseeing climate change and energy policy. He began that job in December 2013 and resigned in February 2015 to join Hillary Clinton's campaign.

Podesta thinks Americans are *owed the truth* from their government. Podesta's passion for truth about UFOs is reflected in a morning tweet he sent on the day he left the Obama administration to run Hillary Clinton's campaign. The tweet said: "1. Finally, my biggest failure of 2014: Once again not securing the #disclosure of the UFO files. #thetruthisstilloutthere…" He copied his tweet to *New York Times* columnist Maureen Dowd.

In late December 2015, reporter Daymond Steer from New Hampshire's *Conway Daily Sun* asked Hillary Clinton about UFOs. She answered: "Yes, I'm going to get to the bottom of it… I think we may have been [visited already]. We don't know for sure."

Then, referring to her campaign chairman, John Podesta, Hillary Clinton added: "He has made me personally pledge we are going to get the [UFO] information out. One way or another. Maybe we could have, like, a task force to go to Area 51 [in Nevada]."

Now, from John Podesta's hacked emails, we see that by January 2016 Tom Delonge was organising a meeting to introduce Podesta to at least three of the military and aerospace advisers that Tom has been working with to reach millennials about what's really behind UFOs and ETs.

Tom, who played guitar and sang with the band Blink-182 in the 1990s, is now producing books, documentaries and a Hollywood feature film about what he is learning from his UFO advisers.

UFOs, Two Retired US Air Force Generals and Lockheed Martin's Skunk Works EVP

The hacked Podesta emails show that three of Tom Delonge's advisers are:

1) Major General William Neil McCasland, who was Commander of the US Air Force Research Laboratory at Wright–Patterson Air Force Base from May 2011 until October 2013. After he retired from the Air Force, he became Director of Technology for an Albuquerque, New Mexico, company called Applied Technology Associates, which specialises in real-time processing systems for ground, air and space applications.

2) Robert F. Weiss, Executive Vice President and General Manager of Advanced Development Programs at the famous "Skunk Works" at Lockheed Martin Aeronautics. Mr Weiss is a US Naval Academy graduate with a master's degree in systems management from the University of Southern California.

3) Major General Michael Carey, who retired in 2014 after serving as Special Assistant to the Commander of the USAF Space Command.

Keeping track of the steady stream of hacked Podesta emails is Grant Cameron from Winnipeg, Manitoba, Canada.

Grant produces the excellent website www.PresidentialUFO.com and has written four books about UFOs including *The Clinton UFO Storybook: ET Politics in The White House* (June 2016).

I have been talking with Grant about not only Tom Delonge's UFO advisers but John Podesta's efforts for disclosure with Hillary Clinton, and a third group, not so well known but also working behind the scenes to open up the truth that we're not alone in this universe.

[Following are edited extracts from Linda Moulton Howe's three-part interview with Grant Cameron in October 2016. Ed.]

Extract from Interview Part 1

Linda Moulton Howe (LMH): Who is the third group?

Grant Cameron (GC): Okay. The third group is more of a positive. I know…maybe six or seven people in this group. And these are NASA,

CIA, possibly White House. It's not a group I'm involved with. I know some of the people. I've heard this chatter for more than a year.

And there are two [people] who are crossovers [between groups] that I know. One is the head; they call him "the Big Man". He's a civilian. It's going to be a shocker when people find out that one of these people is a crossover. I've talked with two of them about what's going on.

What I would say is what Tom Delonge says about his group: that when you know these people, you realise there is no evil government. These people are ordinary people; when you meet them, you can trust them. They come to birthday parties. They are just guys who are doing their job and they are doing it to the best of their ability.

And I think Tom Delonge says the same thing: that this situation is way more complex than people think it is. It is not just aliens flying around in little metal ships with antigravity engines. This is very, very complex. Everybody is saying the same thing.

The other thing that seems to cross over is that there is a *plan*, especially with the third group. This is not something they are trying to figure out. They have a plan for what they are going to do.

And when you look at John Podesta's moves, that's what it looks like. John Podesta…he does this, he does this, he does this as if he's following a pattern. Things have intensified. Something is in the works. To me, it looks like it's full speed ahead, that something is about to happen. But I have no idea what it is, except that they want this story out!

Extract from Interview Part 2

LMH: Grant, the third presidential debate with Hillary Clinton was on October 19th, and there had been several days of WikiLeaked Podesta emails about Major General McCasland and email addresses for Major General Michael Carey and Robert Weiss of Lockheed's Skunk Works. Why do you think the UFO link to high-ranking military and aerospace people was not reported by the so-called mainstream media? And if Podesta has been pushing reporters for over a year to ask Hillary about aliens, why do you think none of this got into the debate questions?

GC: Because the media still doesn't take it seriously. The media still thinks it's a joke. They really don't realise that they've been had. So people aren't really dealing with it. They still think it's kind of a kooky issue.

There's a famous comedian who has an online show and he put out the top 10 subjects in the WikiLeaks Podesta leaks. He has UFOs as number ten. He has Hillary Clinton's daughter being a brat as number eight. And to the person who sent it to me, I said: "Are you serious?! You're going to tell me that Hillary Clinton's daughter is a spoiled brat is more important than the UFO thing?"

But that's how they look at it. It's really not that important. It's more interesting what John Podesta said about the Catholics or the Blacks. That seems to get the headlines. People just aren't taking it that seriously.

Most of the stuff that I have, I've put on my Facebook site. I put the latest email leak and what it means, like who these people are and why this is a significant email.

I download this stuff to all the reporters, who have done stories on the UFO angle to the WikiLeaks dump. But they haven't followed up on the generals. They haven't followed up on this thing where Podesta was going to go to the President. None of them has picked up on it yet. Most of the stories are about Trump. I said the media is still asleep.

And Billy Cox ["De Void" blog for the *Herald-Tribune*, Sarasota, Florida] came out and said for the record: "I emailed them all." He emailed all those generals. He emailed Weiss at Skunk Works. And Billy Cox asked them to comment on being in this Google Hangout—and they all, of course, are trying to wait this thing out: "Just stay quiet, don't say anything. The media will go back to sleep."

But a day will come when the *New York Times* and the *Washington Post* realise that they've been had, and they decide they are going to put six reporters on the UFO story. They are going to talk to their high-level sources.

LMH: Well, on October 16th, at least the Sunday edition of the

Washington Times had the article and headline, "Leaked Podesta emails encourage UFO buffs seeking declassification in a Clinton administration". And it lays out some of the WikiLeaks and John Podesta hacked emails.

One dated 18 January 2015 is from Dr Edgar Mitchell to John Podesta, asking with urgency for a meeting after Podesta leaves the White House in a couple of weeks to become Hillary Clinton's campaign manager. [Apollo 14 astronaut Dr Edgar Mitchell passed away at the age of 85 on 4 February 2016. Ed.]

Dr Mitchell wrote to Podesta: "It is urgent that we agree on a date and time to meet to discuss Disclosure and Zero Point Energy… My Catholic colleague Terri Mansfield will be there too, to bring us up to date on the Vatican's awareness of ETI." "ETI" is "extraterrestrial intelligence".

Then, on 18 August 2015, Dr Mitchell wrote in another hacked email: "Because the War in Space race is heating up, I felt you should be aware of several factors as you and I schedule our Skype talk. Remember, our nonviolent ETIs from the contiguous universe are helping us bring zero point energy to Earth. They will not tolerate any forms of military violence on Earth or in space."

Grant, by "contiguous universe" do you think Dr Mitchell means a parallel universe or another dimension?

GC: I'm not too sure. To me, "contiguous" always meant sort of like the non-local thing. He had a lot of contacts in the scientific community who were big into consciousness, big into how reality actually works and the whole holographic universe idea.

The bottom line to this whole thing is consciousness. That's how they fly the ships. That's how they move from one point to another point in space.

He might have meant something more. It's hard to say. There was a lot of stories, *Wall Street Journal*, *USA Today*—they all ran with the story of Edgar Mitchell. I don't think any of them touched the story of the generals, which is the more dramatic story: that high-level military officials sat down with Podesta, the former Chief of Staff for Bill Clinton and the Chairman of Hillary Clinton's campaign, the guy who set up Barack Obama's Cabinet and was an adviser to Barack Obama, and they had a meeting about UFO disclosure. There are no ifs, ands or buts! That's what that meeting was about.

I would predict that you have not even seen anything close to the emails that deal with UFOs and John Podesta.

Extract from Interview Part 3

LMH: So why are ETs mutilating animals around the world and abducting humans?

GC: Well, you get into that if you ask the experiencers "Is this evil?" Only nine per cent will say it's evil. You say: "If you had to do this over again, if you could get the aliens to stop doing it…" and 83 per cent would say: "No, don't stop it." So we have this idea that it's some sort of invasion.

I maintain through my discussions with Mary Rodwell [the Australian abductee researcher] that if you regress everybody deeply and you ask them "Did you agree to be in this situation?", everybody will agree that this was something they planned before they came in here, that this is not abduction. This is an agreement to raise consciousness, and these people are playing a role in the whole thing.

As to cattle mutilations, we may not know what is going on with cattle mutilations. It may look very bad, but if you were doing cattle mutilations, why would you not take that cow with you? Why would you drop it in front of everybody for people to investigate and make it so bizarre? It's like this is message time, making people think. If you need the fluid or you need whatever, why would you drop the cow? That's the $64,000 question.

LMH: Well, but you have also been exposed, like I and others in our investigations, to what people inside the government behind the matrix have been alluding to for several decades, there is a secret war. Humans have allies that are from somewhere else. But there are also enemies, unfriendlies, from some place else. And there is something going on concerning Earth that is a geopolitical territorial conflict. Is it a war over who claims us? Claims the Earth? Claims this solar system? There is some kind of secret war.

GC: I don't agree with that. It's

oneness. It's consciousness. You have two laws: it's either oneness, consciousness is the basis, which means it's all one. Or you have the idea of separation, that it's separate. It's duality. It's good versus bad. Us versus them. The Americans versus the Mexicans, and this kind of duality-type thing.

If you look at the experiencers and Edgar Mitchell's survey of the experiencers, 54 per cent are talked to [by aliens] about oneness and love. And you get this idea that almost none of them thinks it's evil. So I believe that they [aliens] get here and go through how a craft is flown. I've got all these people on record telling me how the craft is flown, how they are allowed to fly it.

And it all comes down to this idea of consciousness being the basis of the thing. That's how they [aliens and abductees] fly the craft. That's how they move around in time and space. You have to understand oneness. There is no time. There is no space. There is no physical universe. It's all consciousness and it's like a dream thing, and they understand this and we don't.

We still think it's a physical 3D world with time and space. We're still living in these rules of Newtonian physics and we believe that things are measurable and that time is a real thing, that space is a real thing.

Even back in Einstein's day, he was saying that these things are probably going to be illusions. My opinion is that we've got a lot of the basic stuff wrong. When you get into quantum physics, all this kind of stuff really starts to be questionable as to what reality is and how reality actually works.

Is Our Universe Someone Else's Computer Simulation?

LMH: A lot of papers are beginning to surface in science about the question: could this universe be someone else's computer simulation?

GC: Yeah, that's the same idea, exactly the same idea, except they are changing it as a computer simulation. And if you look at the channellers or the consciousness people, they'll say it's all like a dream. It's not a real 3D solid thing that we think it is.

I always reference people to go and look at the work that was done at Stanford University on lucid dreaming. It was first established in 1975 at Stanford that you could actually be awake in a dream, and people who come out of those dreams will tell you that it was more real than the real world, more real than reality. So if that's a dream, that's where you start to question whether we really know what's going on.

People will say: "Okay, even some of the aliens say we weren't abducted, but they come in the dreams." And the aliens will say: "We come to you in your dreams because now you are in our world."

I'M SORRY ABOUT THE LAYOFFS, BUT USING THIS ON THE NIGHT OF DECEMBER 24th IS GOING TO PUSH PRODUCTIVITY THROUGH THE ROOF..
Somerville

And that's what I think *they* are. They are in this sort of lucid dream-type thing where they are able to come into the physical reality and then go back.

Or you'd see that the number one [alien] being reported by experiencers, according to the Edgar Mitchell survey, is not a Grey. It's not an alien. It's a ball of light. And so the question is: if it's a ball of light that changes into an alien that a lot of people will describe, is it physical? Or is it a ball of light?

They [other intelligences] are able to move from this sort of lucid dream–type world into the physical world, back into their world, and we just think that all that world is illusionary and that we live in the real world, which is not the way it is—that *they* are in the real world and we're in the illusion.

LMH: But why would another dimension bother with humans on planet Earth in this small arm of the Milky Way galaxy?

GC: Because once you get into that world, it's like a person on a psychedelic experience or somebody that has the nirvana experience of meditation. Or Edgar Mitchell's experience when he was coming back and he had this experience where he realised that he was one with the universe, that we're all one. So once you realise that it's all one, then you're into the help mode.

When you're in the separation mode, when you think that everything is separate or individual, then it's rape, pillage, steal whatever you can get. Whoever's got the most toys when they die, wins. That's the world we live in now. It's this separation world where it's me versus you and if I don't steal your stuff, you're going to steal my stuff. And we kill all the bad people. There are bad people and we're the good people. *We're* always the good people.

But in a Oneness universe where we realise we're all leaves on the same tree, then you have this idea where you're there to help, that

you're there to grow, and that's what evolution…what reincarnation is about is becoming better and better and better. It comes down to this world of helping people rather than the idea of being separate from everybody else and wanting to gather up physical things.

Friendly versus Unfriendly ETs

LMH: Controlled remote viewer Lyn Buchanan, who worked for the Defense Intelligence Agency at Fort Meade, Maryland, in 1986 to 1989 [next door to the NSA], said that one of his remote-viewing tasks was to view friendly and unfriendly extraterrestrials in this universe.

Lyn said that he and other remote viewers have reported that the universe is teeming with life. A lot of it is friendly and wants trade routes. But there are real unfriendlies and they like to exterminate and control and have territory. Our planet is a reflection of those differences.

One of Edgar Mitchell's emails to John Podesta said that the ETIs in the "contiguous universe" are not going to allow violence on Earth. But that seems contradicted by the fact that humans on Earth are in a century in which we have had non-stop violence on Earth, and the biggest arguments are over religious issues.

GC: No. No, it's not true. My major [in university] was political studies and I studied the Russian government. And I know that the key Number 1, 2, 3 exterminations in the 20th century had nothing to do with religion. The Number 1 was the Chinese in the 1967 to 1975 period. Up to 78 million people were killed. There was no religion involved there at all. That was a communist atheist regime, the same as Lenin's and Stalin's in the Soviet Union. An estimated 20 million people were killed, and that had nothing to do with religion. People in Cambodia were executed. That had nothing to do with religion.

What it comes down to is

separation. It's believing that I'm different from you: the Republicans are better than the Democrats or Democrats are better than Republicans. The Whites are better than the Blacks. And Germans are better than Jews. It's separation that causes all evil and war. Religion, yes, plays a part because it's separation: my religion is better than your religion. But if you take a look at what's going on in the United States, this big divide between the Republicans and the Democrats, it's a sort of stand-off where it almost looks like it's going to be a civil war. There's a Syria-type situation. That's got nothing to do with religion. That's got to do with political ideology. So it's separation and not religion.

Tom DeLonge brings this into Skunk Works and into these people, and he says that religion is the basis of all UFO stuff and that the aliens are getting all the religions to fight against each other. It's like the US military. It's like we just need another enemy! You know, if we run out of the Arabs and blaming North Korea, then we're going to go after the aliens.

So, when you give the briefing to the President, you say: "They are evil aliens and we need to spend money on weapons, and we have to fight them off because they are coming to get us." It's the whole separation argument: "We're the good guys and the aliens are the bad guys."

LMH: If the truth were your and Edgar Mitchell's perspective that the universe is one and entangled and everything is fine, why wouldn't the United States government and England and others have told the entire world about the presence of other intelligences that are entangled in one and everything is fine—long ago?

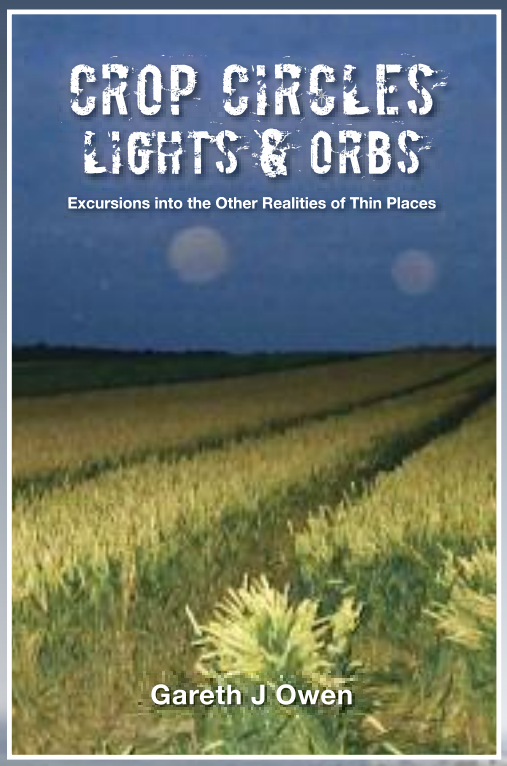
GC: Because they are still living in a world of separation. It's run by the US military!

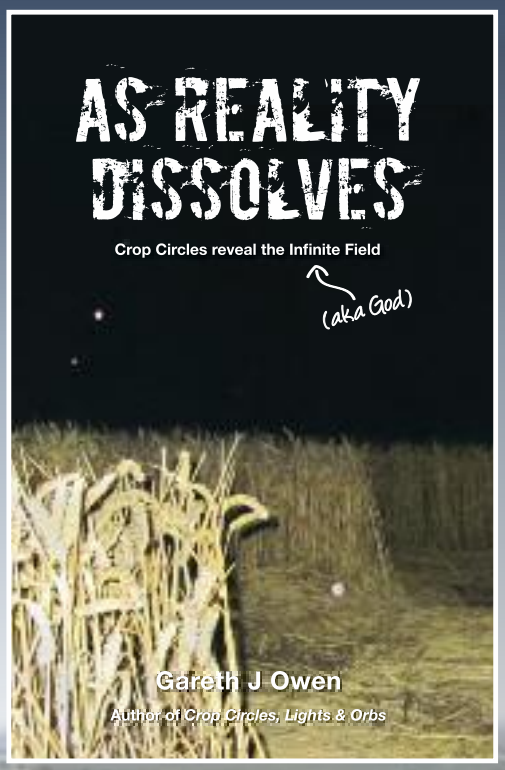
LMH: But it isn't all just one agenda and it isn't just one ETI, that there are ETIs that may want us to evolve and are trying to hurry our evolution because they know that there are bad guys and that we are vulnerable as long as we are being kept in the dark about what is in this universe.

GC: It's not a direct thing where they land on the White House lawn like an invasion and tell us how to live our lives. That's definitely not what's going on. It's a very, very complex phenomenon, and Tom Delonge is saying his people are telling him that, and I would agree with that. It's much more complex than people think it is. ∞

(Source: Extracted and edited from Linda Moulton Howe's Earthfiles.com, 28 October 2016, http://tinyurl.com/zg56oh5)

back into the crop circles and beyond ...





'Fascinating and entertaining reading ... highly recommended.'

Duncan M Roads
Editor NEXUS Magazine

One book $29

Both books $39

inc. postage in Australia

nexusmagazine.com
mistymoonmountain.com

TO ORDER CALL NEXUS ON 07 5442 9280

ALZHEIMER'S DISEASE
by Lawrence Broxmeyer, MD
CreateSpace, USA, 2016
ISBN 978-1-491287354 (165pp)
www.Amazon.com

When Dr Alois Alzheimer became convinced that he'd found an entirely "new disease", he ignored the body of peer-reviewed studies on degenerative plaques implicating an infectious agent: *Mycobacterium tuberculosis*.

For his latest book, Lawrence Broxmeyer, MD, engaged in years of medical sleuthing to uncover how this disease's cause was researched and rejected (see extract in 23/06). He's assembled a mass of historical material and scientific findings, and considers key developments and figures in the field from the late 19th century up to the early 1970s.

Dr Broxmeyer also looks into the vaccine adjuvant containing the "killed" tuberculosis (TB) species developed by Dr Jules Freund and introduced in the 1940s—a recipe for future TB outbreaks. He touches on the link between TB and other mycobacteria that are transmitted via mosquito vectors, as researched on Guam in the mid-1950s.

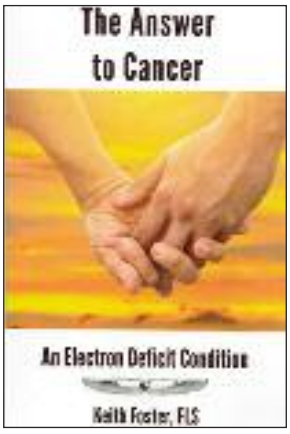
This is essential reading for medical practitioners and those whose lives are affected by Alzheimer's disease and, indeed, by TB. Dr Broxmeyer has retrieved forgotten details that are relevant today in treating these illnesses.

THE ANSWER TO CANCER
by Keith Foster, FLS
SAGAX, Monmouth, UK, 2016
ISBN 978-0-9532407-5-3 (138pp)
www.keithfoster.co.uk
www.Amazon.com

Cancer is not so much a disease as a condition that can be reversed, says Keith Foster, author of many frontier health books, natural philosopher and Fellow of the Linnaeus Society of London (see review of *Catastrophe?* in 14/02).

This condition, Foster says, is an electron deficit disorder, and key to his prescription is to attract electrons into the bloodstream. Taking large doses of vitamin C and the correct ratio of essential fatty acids assists the electrically charged bloodstream to transfer its charge into cells; and ingesting oxygen and water helps the body generate a voltage gradient across the cell membrane, translating into more energy production. Other helpers in this recharging process are iodine, vitamin E, selenium, charcoal C_{60} and turmeric. Foster advocates increasing the intake of alkaline foods, and he includes dietary guidance tables. He reiterates the view that cancer is a fungus or at least has fungus-like properties with similarities to the prevalent *Candida albicans*, so heat treatments can help, seeing that fungus is heat sensitive, as can natural antifungals.

Foster also has advice on reversing the ageing process and protecting ourselves in the new electromagnetic environment in his easy-to-read, practical book.

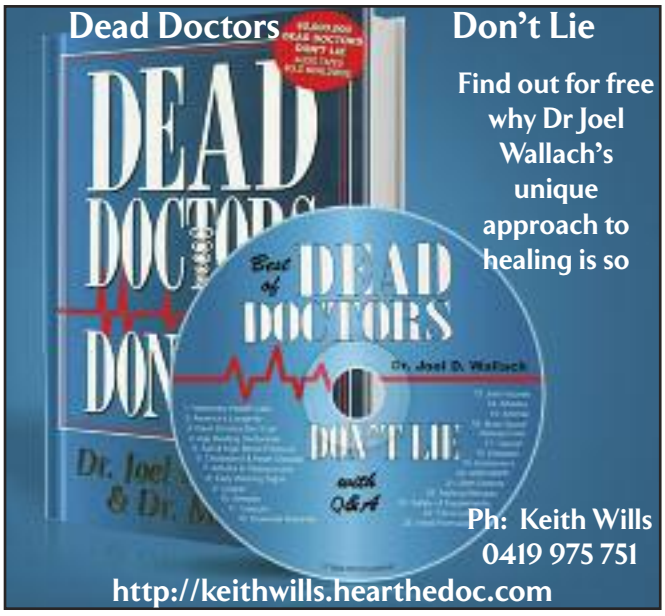


The Geometric Design Behind this World

Things have definitely been shaken up with the USA election! From the perspective of the bigger reality, no Hillary means no 'No Fly Zone' and thus, no war with Russia - for that was the agenda, and it was horrifying to contemplate.

But the *spiritual* reality has still never been seen

http://www.Soul-Search.org/Wake-Updates-hologram1.html


Dead Doctors Don't Lie
Find out for free why Dr Joel Wallach's unique approach to healing is so
Ph: Keith Wills
0419 975 751
http://keithwills.hearthedoc.com

VACCINATION POLICY AND THE U.K. GOVERNMENT
by Christina England & Lucija Tomljenovic, PhD
CreateSpace, 2015
ISBN 978-1-51883-236-9 (264pp)
www.Amazon.co.uk

As a result of her own experience of being falsely accused of Munchausen syndrome by proxy (MSBP) while caring for her two adopted disabled sons, British journalist Christina England now helps other families who have been wrongly tarnished with MSBP and shaken baby syndrome labels when their children had actually suffered adverse reactions to vaccines. For her book, England teamed up with Canadian-based biochemist Dr Lucija Tomljenovic who specialises in vaccine neurotoxicity.

One of the few experts who came to England's assistance was psychologist Lisa Blakemore-Brown, who was later targeted by her own professional association for getting too close to the vaccine damage cover-up by the British government and its agencies including the Joint Committee on Vaccination and Immunisation (JCVI).

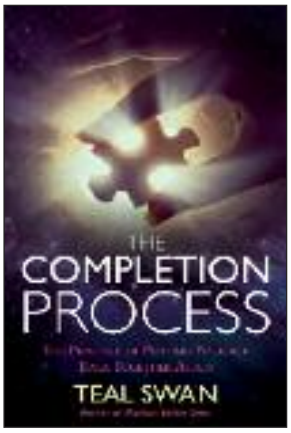
England, who embarked on a massive vaccine research project, explains that even in the 1970s some children were having serious adverse reactions to vaccines and eventually the government had to pay compensation. She also examines research that implicates these same agencies as well as the Ministry of Defence in Gulf War syndrome. Dr Tomljenovic continues the thrust by analysing how the JCVI's vaccination policy is at odds with its code of practice. They back up their exposé with copious references in their hard-hitting, heart-wrenching book.

THE COMPLETION PROCESS
by Teal Swan
Hay House, UK, USA, Aust., 2016
ISBN 978-1-78180-668-5 (202pp)
www.hayhouse.co.uk

All of us suffer from trauma to some extent. Clairvoyant and spiritual healer Teal Swan found a way to gain release as she neared the end of 13 years of ritual abuse that started in childhood. She let herself experience her despair, move through it and find a feeling of relief, of lightness of being. Her five years of counselling with ritual trauma therapists led to her developing a healing modality that she calls "the Completion Process".

Swan explains how the conscious and subconscious minds work, how we process memories, emotions and trauma, and how triggers serve as signals that we need to address emotional wounds. She offers an 18-step process of "putting yourself back together again" in harmony with your current timeline. The steps include creating a safe haven in your mind, validating painful emotions, allowing a shift to a state of relief, and closing the traumatic memory to start anew. She shares heartfelt stories from people who have worked with this process and overcome subconscious barriers.

Swan's Completion Process is a powerful healing technique that helps solve seemingly intractable problems, creating peace for the individual with flow-on benefits for others and the world collective. (For more information, including about workshops and becoming a practitioner in this technique, visit the website www.TealSwan.com.)



RADIO OUT THERE

Internet radio for the mind.

Covering everything from the spiritual and alternative to the paranormal.

Presented by Barry Eaton, author of "*Afterlife - Uncovering The Secrets of Life After Death*".

Listen on www.RadioOutThere.com or download

Fluoride Action Network Australia

Join us – help end the unethical forced mass medication of Australian's drinking water

www.fluoridealertaustralia.org

DYING TO WAKE UP
by Rajiv Parti, MD, with Paul Perry
Allen & Unwin, Australia, 2016
ISBN 978-1-92526-703-7 (217pp)
Atria Books, USA, 2016
ISBN 978-1-4767-9731-1
www.allenandunwin.com
www.Amazon.com

There's now a sub-genre in the literature on the afterlife and near-death experiences (NDEs): medical professionals who have had their own NDEs and out-of-body travels. Rajiv Parti, MD, now joins the list. The chief anaesthetist at Bakersfield Heart Hospital in California, Dr Parti had a series of personal medical emergencies and in 2010 almost died on the operating table. Moving out of body, he could see what was happening in the operating theatre, and in recovery he was able to recall details and conversations and report them to his startled colleagues.

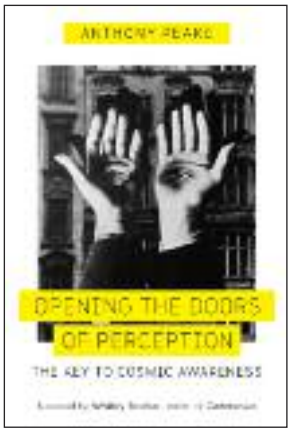
But that wasn't all. He travelled out of body to visit his mother and sister in India; later they confirmed specifics of what he'd seen. Dr Parti next found himself about to enter Hell, but his deceased father and grandfather turned up in spirit and saved him from this fate, passing on unconditional love. Next, he found himself in a heavenly realm where he met angels, archangels and a Being of Light with a message about changing his materialistic, ego-driven life to one of love, forgiveness and healing. It was a transformative experience for Dr Parti, who went on to set up a wellness clinic. His story confirms that consciousness survives death.

OPENING THE DOORS OF PERCEPTION
by Anthony Peake
Watkins, UK, USA, 2016
ISBN 978-1-78028-908-3 (266pp)
www.watkinspublishing.com

With a nod to Aldous Huxley and William Blake's "doors of perception", Anthony Peake extends Huxley's thesis by applying the latest findings from quantum mechanics, holographic theory, neuroscience and consciousness studies in search of scientific explanations for such phenomena as out-of-body and near-death experiences, entheogen-induced hallucinations, and neurological conditions associated with migraines, temporal lobe epilepsy, bipolar syndrome, schizophrenia, autism and Alzheimer's disease. Peake, author of *Is There Life After Death?* (14/02) and many other titles, concludes that all these phenomena and conditions exhibit different stages of the doors of perception being prised open.

Peake explores his idea that there are two independent foci of self-aware consciousness: the Daemon and the Eidolon, with Daemonic consciousness embodied in the brain's non-dominant hemisphere and the Eidolonic in the dominant. People in expanded states of awareness are connecting with the Daemon, which has direct access to the Pleroma—multidimensional reality. Huxley's "reducing valve", he says, closes off this link with the Pleroma so we can focus on survival in the physical world. He also suggests that glutamate may assist glial cells in the brain to download consciousness from the Pleroma.

In his fascinating book, Peake provides a new understanding of so-called mental health conditions and our "inner space" frontier.



NEXUS Newsfeed.com

ANCIENT MYSTERIES

Just one of:
12 Categories
72 Sub-Categories
Hundreds of Topics

FREE ACCESS
www.NexusNewsfeed.com
via app or web browser

UNVEILING THE TRUTH
by David John Oates
Reverse Speech Pty Ltd, Hackham, SA, Australia, 2016
ISBN 978-0-9946320-0-5 (140pp)
www.reversespeech.com

Since his discovery of the Reverse Speech (RS) phenomenon with collaborator Greg Albrecht in 1983 and going public with it in 1987, David Oates has been on a rollercoaster learning curve (see his article in 4/06 in 1996). When he moved from Australia to live in the USA in the 1990s, he garnered support but was subjected to derision, death threats and arson attacks. Oates applied his Reverse Speech technology to analyse world leaders' spoken words in reverse, and he even ascertained the code name in advance of what was to become Operation *Desert Storm*.

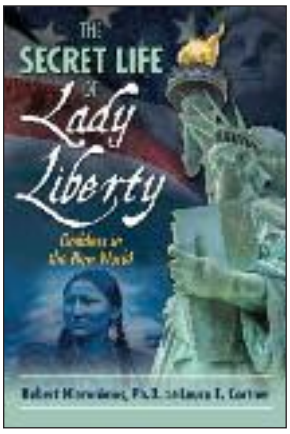
Reverse Speech recordings, Oates maintains, tap into the unconscious mind. While much of these may be gibberish, there are speech reversals at least once every 15 to 20 seconds in normal conversation but only once every 10 minutes in scripted media broadcasts. Recent findings by Oates and his team cover the JFK assassination, the lead-up to the 2016 US presidential election, and the secrets of money-makers from David Rockefeller to Mark Zuckerberg. There are some astounding revelations of alleged subconscious thoughts, although Oates's interpretations are his alone. Oates went on to develop RS-based therapies to help people find their inner truth, but his technology and techniques have been largely ignored by academia. Do they really expose too much?

THE SECRET LIFE OF LADY LIBERTY
by Robert Hieronimus, PhD, and Laura E. Cortner
Destiny Books, VT, USA, 2016
ISBN 978-1-59477-493-5 (428pp)
www.DestinyBooks.com

The French sculptor Auguste Bartholdi drew on many sources for his creation of the Statue of Liberty, gifted by France to the USA and erected on Liberty Island in New York Harbor, the construction completed in 1886. In his research, Bartholdi visited the USA and came to understand the status of women and their reverence in Native American societies. This is a subject dear to the hearts of Dr Robert Hieronimus and Laura Cortner, long-time associates in alternative radio and authorship (see *The United Symbolism of America*, 15/05).

The authors reveal that when Native American leaders were in peace negotiations with European settlers, they asked "Where are your women?" They already had a goddess culture, and its symbolism along with that of Neolithic, Greek, Roman, British and other models inspired the sculptor to create a Lady Liberty to personify America and her destiny. In fact, in the early days of the colony an American goddess was emerging in public art. The Statue served to embrace the nation and provide a conscience, and its symbolism was taken up by women's suffrage activists and the later feminist movement.

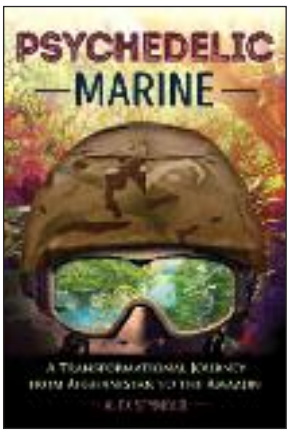
This captivating book, with a wealth of archival material, restates the importance of women and their intrinsic roles in peacekeeping, nurturing and environmental stewardship—roles that need to be shared between the sexes.



A PEACEFUL WORLD AWAITS YOU
BEYOND ALL RELIGION

Most all religions are based upon a bedrock of lies.
Christianity was invented by Emperor Constantine, for political purposes, based upon the myth of Mithra, a Persian savior god born on December 25, son of a virgin. Mithra performed miracles and was later crucified. Moses is based on the Sumerian life and legends of Sargon I, King of Akkad, "set in a basket of rushes and "cast into the river". Egyptians kept exhaustive hieroglyphic records. There is a complete absence of any record of Moses leading over 600,000 men, women and children away from Pharaoh's army.
Joseph Smith, founder of Mormonism, was convicted in a court of Law of being an "impostor", today a fraud, conman, in 1826. He wrote the *Book of Mormon* soon after.
Question: You decide: Does the text of the verses of the Qur'an correspond exactly to those revealed to Muhammad directly as the words of God, delivered to Muhammad through the angel Gabriel, as claimed?
Order "Beyond All Religion", 152 pgs, $9.95, at www.amazon.com, or send mailing address and $9.95 payable to: Sam Butler, SB 197, POB 25292, Miami, FL 33102 USA.

PSYCHEDELIC MARINE
by Alex Seymour
Park Street Press, VT, USA, 2016
ISBN 978-1-62055-579-8 (229pp)
www.ParkStPress.com



After six years in the Royal Marines Commandos from the age of 17, and then 20 years in the corporate world, Alex Seymour rejoined the military and returned to the front line. He was posted to Afghanistan, in Helmand Province, and the enemy was the Taliban. Already a husband and a father of two, Seymour wanted to explore what it meant to be a "good man". His tales of his tour of duty make for some hair-raising reading. But Seymour had another quest: to explore transcendent worlds.

Before he signed up again with the military, Seymour experimented with psilocybin mushrooms and DMT; the awesomeness revealed to him meant that his life would never be the same again. He no longer feared death, as he came to realise that consciousness survives it.

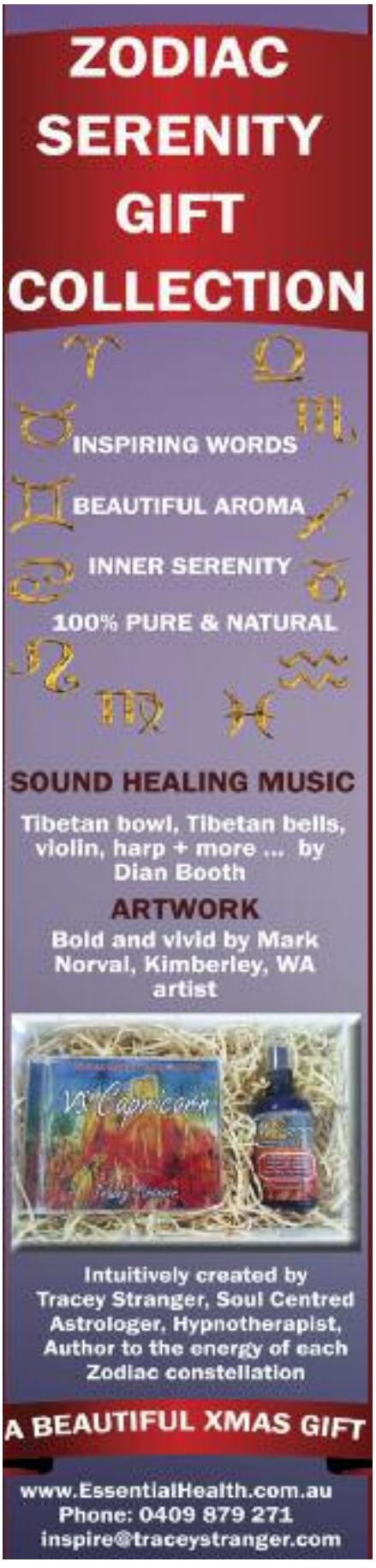
After his service, Seymour sought to take the entheogen adventure further and travelled to the Amazon to join a shaman in ceremonies centred around the hallucinogenic ayahuasca brew. In the company of other seekers, he again had direct perception of the sacred, and his experiences helped him recover from the war and set a path for the future. In his view, the ayahuasca ritual has the potential to prepare soldiers for war and to heal from it. It can offer a meaningful rite of passage for young military recruits and assist veterans overcome PTSD as well as alcohol and drug issues. Seymour's story of transformation has profound implications.

THE JESUS PHENOMENON
by Greg Rigby
Strategic Book Publishing and Rights Co., USA & Singapore, 2016
ISBN 978-1-68181-323-3 (303pp)
http://sbpra.com/GregRigby
www.Amazon.com
www.waterstones.com

Greg Rigby, brought up as a Catholic, has spent much of his life questioning Church teachings. He's previously written in *The God Secret* about the Egyptian religion and its relationship to positions of the stars. He concluded that elements of the Egyptian mysteries have been incorporated into Christianity, but that the old religion had been suppressed since the time of Moses by the Hebrew hierarchy. He'd even stated that there's no real proof that Jesus Christ existed. But now he's taken a fresh look into the possibility that a Jesus Christ persona did in fact exist.

Rigby delves deeply into "the Jesus phenomenon", examining the idea of the "Son of God" from the Egyptian mystery tradition as well as royal bloodlines, prophecies, texts and codices, the children of Jesus, and Hebrew and Christian links to the Egyptian pantheon. Rigby addresses the notion that Jesus was the son of Ptolemy XIII, a plausible explanation that doesn't need to resort to mysticism or divine intervention. He also points to the Freemasons as protectors of the ancient Egyptian secrets.

Rigby holds that Jesus was born to "perpetuate the royal and divine bloodline from Osiris and to consolidate an imperial dynasty". He wonders whether Jesus' close followers connived to promote his divine attributes. He looks to the future and what quantum physics may offer about "the infinite controlling intelligence that we know as God". An alternative history with a difference.



EXTRATERRESTRIAL SANDS by Gary Gilligan

Quartz sand is everywhere imaginable on the surface of the Earth. The question is: where did it all come from? Scholars hold the view that the primary source lies with the weathering and erosion of granite outcrops – a process that is said to take billions of years. But is this correct? Is there anybody brave enough to challenge this seemingly impregnable bastion of geological principles? *Extraterrestrial Sands* does just that by dismantling the consensus model and exploring the radical idea that sand is extraterrestrial in origin. If proven, the theory laid out in *Extraterrestrial Sands* has the potential to rewrite Earth's history. A fascinating read.

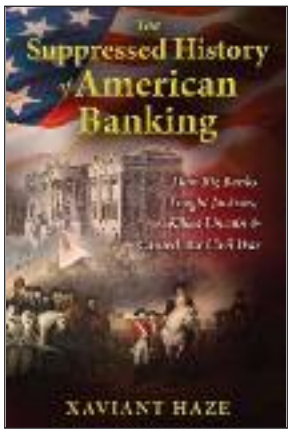
ISBN 978-1-78589-169-4
282 pages paperback
www.godkingscenario.com

FOOD & COOKING

One of the 12 Categories,
72 Sub-Categories and
hundreds of Topics
available to read with
FREE ACCESS
at www.NexusNewsfeed.com
via app or web browser.

NEXUS Newsfeed.com

THE SUPPRESSED HISTORY OF AMERICAN BANKING
by Xaviant Haze
Bear & Co., VT, USA, 2016
ISBN 978-1-59143-233-3 (231pp)
www.BearandCompanyBooks.com



The old adage "follow the money" rings true in this second book in the *Suppressed History* series by Xaviant Haze (the first with co-author Paul Schrag). The theme running through is the role of the powerful Rothschild banking family from the post–American Revolution days to the end of the Civil War. From working behind the scenes with King George III to funding the 1812–14 war on America, fomenting economic crises and sponsoring both sides of the Civil War, the Rothschilds went all out to get their own way.

Yet this is also the story of those who stood up to them. Andrew Jackson, for example, was elected President in 1828 and spent his early days in office weeding out Rothschild agents. In 1835, as Jackson fought the Second Bank of America, the Rothschild family paid a mentally unstable man to assassinate him, but the bid failed. In 1865, another Rothschild hired hand, the actor John Wilkes Booth, succeeded in assassinating President Lincoln who had riled the banking family by having state banks issue "greenbacks". The Rothschilds, Haze writes, conspired to destroy what was a successful monetary system, creating yet another recession and exerting more control over the people.

The sub-theme of Haze's book is the discovery over the decades of giant skeletons, reported in the press of the day, and the interest of several Presidents in the subject. It's an intriguing book with a treasure-trove of archival images. (For more information, visit www.xaviantvision.com.)

THE MYTH OF HUMAN SUPREMACY
by Derrick Jensen
Seven Stories Press, NY, 2016
ISBN 978-1-60980-678-1 (337pp)
www.sevenstories.com

If we humans continue to believe that we're superior to and separate from Nature, we'll kill the planet. This belief in human supremacism is part and parcel of our modern-day culture as well as religion, science, economics, philosophy and many other fields of endeavour. Environmental activist and philosopher Derrick Jensen gives us much food for thought and impetus to change (see the extract from his book in 23/06). Of course, he acknowledges that indigenous peoples are more in touch with Nature, and he has a lot to say about the destruction wreaked by imperialists, colonialists and capitalists with their intrinsic narcissistic, sociopathic, bigoted and entitled mindsets.

Jensen describes the expanse of communication, cooperation and sustainability that exists in and between animals, plants, fungi, microbes and more. He asserts that our planet's lands, waterways and oceans have roles other than being there for humans to exploit. He's written this book for those of us who want to sustain the Earth and understand how the authoritarian, supremacist world-view is trashing our planet and all the life that it holds. He asks that we question our inculcated beliefs, reject becoming servants of a machine culture and realise that we are members of a larger biotic community. Unless we do, we have no hope for the future.

THE PANAMA PAPERS
by Bastian Obermayer and Frederik Obermaier
Oneworld, USA, UK, Aust., 2016
ISBN 978-1-78607-047-0 (366pp)
www.oneworld-publications.com
www.allenandunwin.com

In February 2015, German investigative journalist Bastian Obermayer received a message from one "John Doe" who offered to share some data. In the ensuing months, that data comprised millions of pages of information.

Obermayer and his colleague Frederik Obermaier (the unrelated "Brothers Obermay/ier") at the newspaper *Süddeutsche Zeitung* had already written articles on tax secrecy and secret bank accounts, but what they received was bigger than any previous leak. With the go-ahead from their editors, they requested and received support from the International Consortium of Investigative Journalists (ICIJ) in researching this data dump relating to the law firm Mossack Fonseca, based in Panama and with offices in multiple tax havens.

These data dumps became known as "The Panama Papers" and are the subject of this same-named book that charts the story as it unfolded, leading to the global announcement in April 2016 following the furious analysis by a trusted, global team of journalists and data encryption specialists. Their book keeps the reader riveted about the tax avoidance and/or money-laundering activities of heads of state, dictators, oligarchs, sports officials, art swindlers, arms dealers and drug mafiosi. In the epilogue, the authors outline immediate reactions to the release and include a statement by "John Doe", "The Revolution Will Be Digitized", a savage indictment of the system if ever there was one. The powers that be are on notice.

THE WRITER WITH NO HANDS
by Matthew Alford
Matthew Alford, UK, 2016
ISBN 978-1-53064-987-7 (262pp)
www.Amazon.com

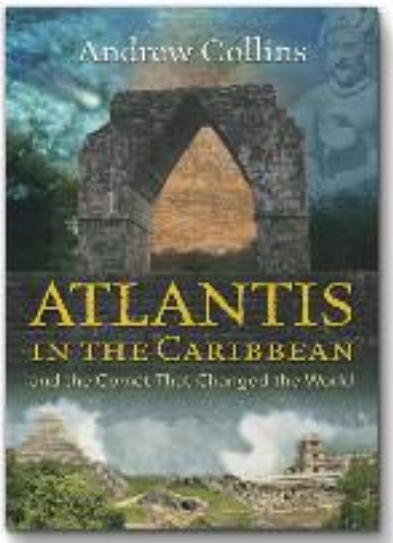
Little did English PhD graduate Matthew Alford know what he was letting himself in for in 2008 when he began investigating the mysterious disappearance in June 1997 of Hollywood screenwriter/producer/director Gary Devore.

Devore was returning from New Mexico to California via the Mojave Desert after finalising his script for *The Big Steal*, reportedly about the real story behind the US invasion of Panama in 1989–90, when he went missing. In July 1998, Devore's car was found in an aqueduct with his body seat-belted in place but with both hands missing as well as his laptop and gun. Or *was* it his body? Many "facts" didn't add up.

Eventually Dr Alford recruited filmmaker Will Westaway and went to California to interview various witnesses and contacts for a documentary, *The Writer With No Hands* (released on the film festival circuit in 2014 and soon to be expanded for general release). Devore's widow Wendy explained that straight after his disappearance their home was searched by CIA, DoD, NSA and FBI agents, and it's believed that Devore had covert intelligence links and may have spent time in Panama with CIA agents at the time of the invasion.

Alford's book is a compelling whodunnit, liberally sprinkled with satire and humour, much of it self-deprecating. The mystery prevails, with many lines of enquiry staying open for when those in the know are prepared to go on the record.

– NEW RELEASES –



Atlantis in the Caribbean
Andrew Collins
$36.99 • Paperback • 528 pages
ISBN 978-1-59143-265-4

The Mystery of Spring-Heeled Jack
John Matthews
$36.99 • Paperback • 360 pages
ISBN 978-1-62055-496-8

INNER TRADITIONS BEAR & COMPANY
Learn more at
InnerTraditions.com *and*
Available Wherever Books Are Sold

FILMS

REVIEWED BY RICHARD GILES

SEED: THE UNTOLD STORY
by Taggart Siegel and John Betz
Collective Eye Films, USA, 2016 (77mins)
www.seedthemovie.com

There are few things on Earth as miraculous and vital as our seeds. They have been treasured since the dawn of the human race. But 94 per cent of our seed varieties have disappeared in the last 100 years. *Seed: The Untold Story* is a documentary that follows dedicated seed-keepers protecting our historical food legacy. Biotech chemical companies are trying to control the majority of our seeds, but farmers, scientists, lawyers and indigenous seed-keepers fight the David versus Goliath battle to defend the future of food. This is a heartening story, and our heroes rekindle a lost connection to this most treasured resource, seeds.

Seed features environmental activists Dr Vandana Shiva, Dr Jane Goodall, Andrew Kimbrell of the Center for Food Safety, Winona Laduke and Professor Raj Patel. It has won many awards including the Sheffield Doc/Fest Environmental Award and the Green Planet Award at the Rhode Island film festival. It's directed by the team behind *Queen of the Sun: What Are the Bees Telling Us?* (2010, reviewed in NEXUS 19/02). Show your friends and family this essential film: our future depends on it.

PROJECT CENSORED
THE MOVIE: Ending The Reign of Junk Food News
by Doug Hecker and Christopher Oscar
Hole in the Media Productions, USA, 2016 (63mins)
http://tinyurl.com/jeszdal

This film, *Project Censored The Movie*, takes an in-depth look at what's wrong with the news media in the USA. It highlights the work of 40-year-strong media democracy organisation Project Censored and its commitment to media education as an antidote to the top-down, managed news propaganda that we're subjected to these days.

Made by Project Censored supporters Doug Hecker and Christopher Oscar, the documentary contains interviews about media censorship with commentators such as Professor Noam Chomsky, Dan Rather, Phil Donahue, Dr Michael Parenti, Greg Palast, Oliver Stone, Dr Daniel Ellsberg, Professor Peter Kuznick, Dr Cynthia McKinney, KPFA Free Speech Radio journalists and more. There are appearances by Project Censored founder Dr Carl Jensen, former Project director and current Media Freedom Foundation president Dr Peter Phillips, current Project director Professor Mickey Huff, and associate director Dr Andy Lee Roth. The film shows that the mainstream media continually fail to serve truth in reporting.

Be sure to read the Project Censored team's compilation of the top 25 most underreported news stories for 2015–2016 in this issue.

Fluoride poisoning: is fluoride in your drinking water and from other sources making you sick?

Fluoride Fatigue outlines the chronic fatigue and other ill effects experienced by many people when they drink fluoridated water. The book notes how to test if fluoride is causing these symptoms and, if it is, how they may often be cured. New Zealand born Dr Spittle has practised over a wide field in the medical profession for over 40 years. He is Managing Editor of ***Fluoride***, the quarterly journal of the International Society for Fluoride Research, since 1999.

Order online via
www.NexusMagazine.com

MUSIC

REVIEWED BY RICHARD GILES

FULL CIRCLE
by Miriam Lieberman
Miriam Lieberman Records, Australia, 2016 (42mins)
http://musicplug.com.au
www.miriamlieberman.com.au

Miriam Lieberman is an Australian singer-songwriter who plays kora (the West African harp) and guitar. *Full Circle* is her fifth album. She performs and records with her trio musicians Lara Goodridge on violin and Kate Adams on cello. Beautiful strings and ambrosial vocal harmonies let the songs open out on this refined album. The interplay of violin, cello and Miriam's signature kora make this a special release. The trio is on tour in Australia for the album launch, with appearances at concerts and music festivals. An impressive listening pleasure.

DONCOMODJA
by Moussa Diakite
Wassa Records, Australia, 2016 (47mins)
www.moussamusic.com
www.theplanetcompany.com

The name of this album means "Gift from God"—the nickname of Moussa Diakite, part of Mali's generation of music pioneers in the 1970s–80s. He's played guitar with the likes of the Super Rail Band de Bamako, Toumani Diabaté's Yanga Orchestra and Salif Keita. His album *Doncomodja* was recorded in Mali with leading local musicians including Bassekou Kouyaté, Toumani Diabaté and Cheick Tidiane Seck, along with his band Wassado from Sydney, where he's been based since 1994. The music is influenced by the Wassoulou styles from southwestern Mali. An upbeat and exceptional album.

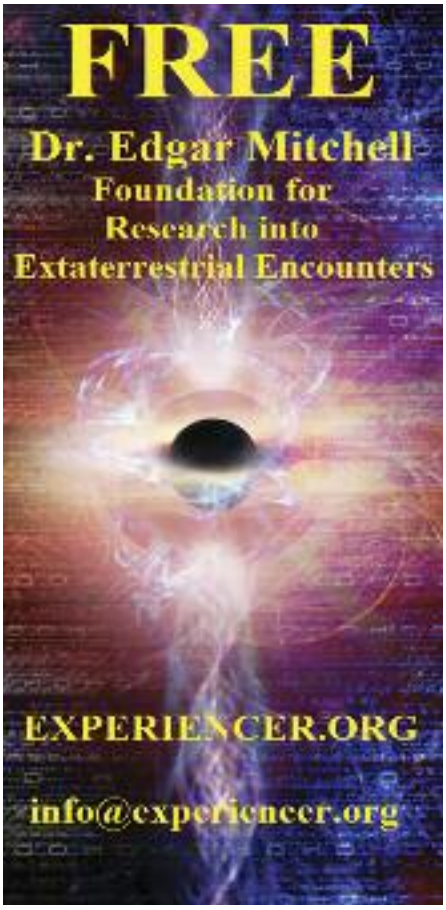
BEAUTY THUNDERS
by Peia
Peia Song Music, USA, 2016 (47mins)
www.peiasong.com

Growing up in North America as a child of Irish, Scottish, Italian and Dutch ancestry, Peia longed to know the songs and rites of her ancestors. Her wanderlust led her from country to country, gathering the songs of her people and her heritage, songs celebrating the seasons and cycles of life. *Beauty Thunders* features, among others, Guy Madigan on bodhrán and Biko Casini on calabash. Peia's vocals on the Irish ballad "Bánchnoic Eireann Oigh" are heart-stopping. "May you walk in beauty and remember your song," says Peia.

FIO DA MEMÓRIA
by Luísa Maita
Cumbancha Music, USA, 2016 (40mins)
www.cumbancha.com
www.theplanetcompany.com

Brazilian songwriter and singer Luísa Maita had a hit in 2010 with *Lero-Lero*. On her second album, her intense and seductive vocals are combined with very hip electronica and touches of jazz and samba. Of *Fio da Memória* (meaning "Thread of Memory"), Luísa said: "I wanted to revisit the Brazilian rhythms and other sounds that I…heard growing up, from a contemporary and electronic perspective." Luísa and her band ride waves from edgy to cool, and her colourful album artwork reflects this. Enlivening music, redefining the soundscape of urban Brazil.

ZA/PET
Hulda Clark Zappers
CLINICALLY PROVEN at the UNIVERSITY of WASHINGTON to target CANCER cells. Very effective for RESTLESS LEGS Sufferers
Thousands of these machines have been sold over 20 years with excellent results .Bio-electronic therapy can kill the viruses and parasites in your body that may cause a wide range of common diseases and viral/parasitic conditions
Order yours today
$200Au inc
Send for FREE info Pack
Prevention is better than cure
2 Maitland St - Greerton - Tauranga - NZ
Mobile: 027 2013552
A/Hours & Fax: (07) 541 0028 - NZ
Website: www.za-pet.com
Email: info@za-pet.com



Discover Your Path to Inner Freedom

"One Light" by Jon Whistler

A factual story as experienced by the author and two companions who inadvertently discovered a module buried in the ground.

In this book, you will discover the answers to your deepest questions and learn the true ntaure of your being and your purpose here on the planet.

ONE LIGHT is not merely an astonishing story, it is FREEDOM ITSELF. It will free you from all the oppressions and all the binding chains of this world. It will help you to find freedom from old voices and guilts, and will release you from the fear that plagues our planet.

Light Pulsations
Online Store

LightPulsations.com

Tero, Dero & the Hollow Earth DVD
Is the Dero connected to the Hindu Elephant God Ganesha?

Who are the benevolent Tero & malevolent Dero peoples of the underground caverns? Includes Richard Shaver, who was one of the first to report about the technologically advanced Tero & Dero people who were at war with each other.
We cover what the ancient Dero looks like, their technology, possible locations, agendas & their satanic influence. The possible connection between the Dero & the Hindu elephant god Ganesha, the resemblance is uncanny! Has a Dero been caught on video? Watch the surprising resemblance!

Black Goo DVD
Covers the Mysterious Black Goo, What is its Agenda & Purpose?

We will attempt to unravel much about what this mysterious oily-substance is?

There are two types of black goo, one by Mother Nature & the other being artificial intelligence. Black goo is sentient fluid, & is conscious & aware of its surroundings, it also responds to RF signals & can affect a person either negatively or positively in some circumstances. It can also use a human as a host. There's also a link with morgellons disease & possibly chemtrails.

Breakaway Civilisations DVD
From Secret Space Programs to Incoming Transformational Cosmic Frequencies

Secret Space Programs have been going on since the 1940s & 50s, using advanced free energy space technology. Secret Earth Space personnel have been travelling to & from planets such as the Moon & Mars utilizing jump decks, stargates & portals. Some portals being natural organic & others artificially created.
Covers meetings with ETs & more.

9/11 The Best Evidence Yet DVD
We Know Who YOU Are!

Includes, but not limited to the involvement of MOSAAD, CIA, Saudi Arabia, Bush's, Silverstein, Cheney, Rumsfeld and Los Alamos Lab.
Evidence that demolitions & nano-thermite was used & more.

Tero, Dero & the Hollow Earth Pal HD 2hrs : 8mns
Black Goo Pal HD 5hrs : 4mns
Breakaway Civilisations Pal HD 6hrs : 43mns
9/11 The Best Evidence Yet Pal HD 6hrs : 21mns

1 DVD $26.80 : 2 @ $47.80 : 3 @ $66.80 or the 4 @ $90.95 POST PAID!

Phone, Post or Shop on-line! CHQ, MO, VC, MC, AMX accepted
New World Transitions: P.O Box 68, Sandown Village, VIC 3171, Australia | Mob: +61 (0)466 425 174 | NewWorldTransitions.net

Project Censored: The Top 25 News Stories of 2015–16

Continued from page 23

25. NYPD Editing Wikipedia on Police Brutality

In March 2015, Kelly Weill reported in Capital New York that computers operating at One Police Plaza, the headquarters of the New York Police Department (NYPD) had been used to "alter Wikipedia pages containing details of alleged police brutality", including the entries for Eric Garner, Sean Bell and Amadou Diallo. Inae Oh wrote for *Mother Jones*: "The pages have been edited to cast the NYPD in a more favorable light and lessen allegations of police misconduct." According to Weill's report, an NYPD spokesperson indicated that the matter is "under internal review".

Capital New York identified 85 Internet protocol (IP) addresses associated with the NYPD that had been used to edit or to attempt to delete Wikipedia entries. "Notable" Wikipedia activity was linked to approximately one dozen of those IP addresses, Weill reported.

On the evening of 3 December 2014, after a Staten Island grand jury ruled not to indict NYPD officer Daniel Pantaleo in Eric Garner's "chokehold" death, a computer user on the NYPD headquarters network made multiple edits to the "Death of Eric Garner" Wikipedia entry. As the *Mother Jones* article noted, additional edits suggested that "Garner's death was his own fault".

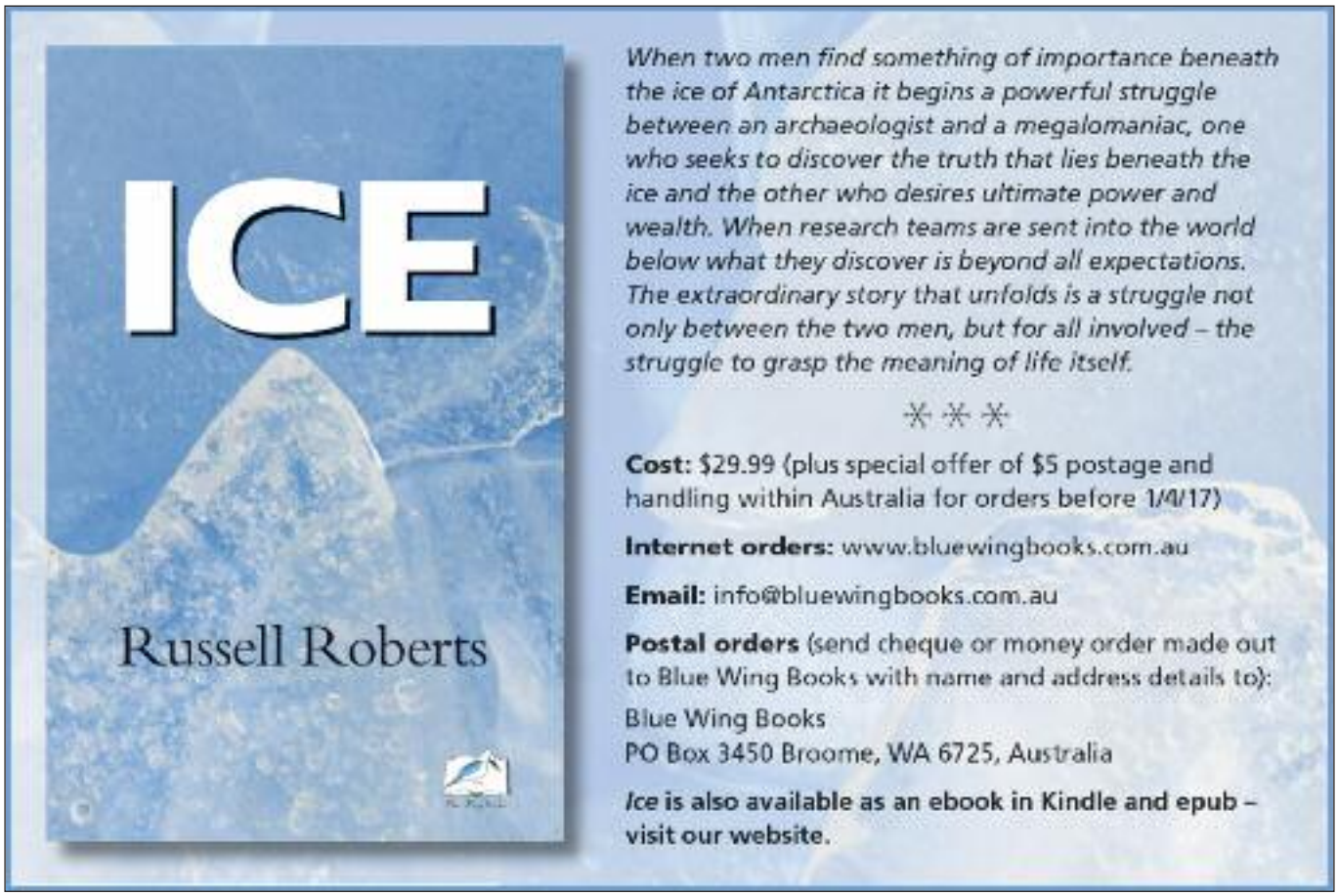
On three occasions between October 2012 and March 2013, a user on the One Police Plaza network made edits to Wikipedia's "Stop-and-frisk in New York City" entry.

All of the NYPD edits documented by Capital New York were made anonymously, rather than with a Wikipedia account. Capital New York developed a computer program to search Wikipedia for all of the anonymous edits made from the range of IP addresses registered to One Police Plaza. Weill concluded by providing a link to a list of all the anonymous Wikipedia edits made by NYPD IP addresses. ∞

Editor's Note:

Project Censored was founded in 1976 by Dr Carl Jensen at Sonoma State University, California. Since 2000, the Project has come under the oversight of the non-profit Media Freedom Foundation. The Project's director since 2010 is Professor Mickey Huff, also a board member of the Foundation. Since its inception, the Project has trained more than 2,500 students in media literacy. For more information, visit the website http://www.projectcensored.org.

This article is edited from Project Censored's compilation "The Top Censored Stories of 2015–2016". To see the complete text with references and links, go to http://tinyurl.com/hor99od. The yearbook *Censored 2017: Fortieth Anniversary Edition* (Seven Stories Press, 2016) is available from www.projectcensored.org, www.sevenstories.com and www.Amazon.com.


ICE
Russell Roberts
When two men find something of importance beneath the ice of Antarctica it begins a powerful struggle between an archaeologist and a megalomaniac, one who seeks to discover the truth that lies beneath the ice and the other who desires ultimate power and wealth. When research teams are sent into the world below what they discover is beyond all expectations. The extraordinary story that unfolds is a struggle not only between the two men, but for all involved – the struggle to grasp the meaning of life itself.
Cost: $29.99 (plus special offer of $5 postage and handling within Australia for orders before 1/4/17)
Internet orders: www.bluewingbooks.com.au
Email: info@bluewingbooks.com.au
Postal orders (send cheque or money order made out to Blue Wing Books with name and address details to):
Blue Wing Books
PO Box 3450 Broome, WA 6725, Australia
Ice is also available as an ebook in Kindle and epub – visit our website.

Reading Between the Lies: Public Relations, Propaganda and the Press

Continued from page 29

returned to freelance writing. His articles "Trials and Tribulations: The Truth about Clinical Research" and "Animal Pharmacy: The Case Against Testing" were published in NEXUS vol. 23, nos 1 and 2 respectively. He is a regular contributor to the US animal rights magazine *The Animals' Voice*.

Leon Horton lives in Manchester, England, and can be contacted by email at leonhorton@live.co.uk.

Endnotes

1. Bernays, Edward L., *Propaganda*, Routledge, New York, 1928, pp. 47-48
2. Blyskal, Jeff and Marie, *PR: How the Public Relations Industry Writes the News*, William Morrow & Co., New York, 1985, p. 28, quoted in: John C. Stauber and Sheldon Rampton, *Toxic Sludge Is Good For You: Lies, Damn Lies and the Public Relations Industry*, Common Courage Press, Monroe, Maine, 1995, p. 183
3. Bernays, Edward L., *Public Relations*, University of Oklahoma Press, Norman, Oklahoma, 1957, p. 4
4. Bernays, *Propaganda*, op. cit., p. 9
5. ibid.
6. Dowie, Mark, "Torches of Liberty" (Introduction), in: Stauber and Rampton, *Toxic Sludge Is Good For You*, op. cit., p. 3 (US edition)
7. Davies, Nick, *Flat Earth News*, Vintage, London, 2009, p. 167
8. op cit., p. 53
9. op cit., p. 66
10. op cit., p. 67
11. op cit., p. 73
12. op cit., p. 75
13. Stauber and Rampton, op. cit., p. 205
14. ibid.
15. Pulitzer, Joseph, "The College of Journalism", *The North American Review* 1904 May; 178(570):641-680, p. 680, http://tinyurl.com/zxxlxa

Digital Consciousness: The Answer to Life's Great Mysteries?

Continued from page 61

developing one of the first PC-based music samplers in 1988 and co-founding RadioAMP, the Internet's first private-label web radio company. Elvidge is currently an agile and leadership consultant helping companies become more lean, innovative and resilient in all aspects of their business.

Outside the high-tech arena, however, Elvidge has had an alternative career, focusing on a form of digital philosophy by synthesising ideas from the varied fields of artificial intelligence, cosmology, nanotechnology, quantum mechanics and the paranormal. This unique blend of knowledge provided the foundation for his first book, *The Universe – Solved!* (AT Press, 2008). He frequently appears on radio talk shows that focus on futurism and digital philosophy.

Jim Elvidge can be contacted by email at jim@theuniversesolved.com. For more information, visit his website http://www.theuniversesolved.com.

Endnotes

1. Flew, A. and G. Habermas, "My Pilgrimage from Atheism to Theism", *Philosophia Christi* 2004; 6(2):197-211, p. 198, http://tinyurl.com/jpnvk5w
2. Tegmark, M., *Our Mathematical Universe*, Alfred A. Knopf, New York, 2014, p. 334
3. Hossenfelder, S., "Minimal Length Scale Scenarios for Quantum Gravity", *Living Reviews in Relativity* 2013; 16(2), arXiv:1203.6191v2 [gr-qc]
4. Wheeler, J.A., "Information, Physics, Quantum: The Search for Links", *Proc. 3rd Int. Symp. Foundations of Quantum Mechanics*, Tokyo, 1989, pp. 354-368, http://tinyurl.com/h5vbcql
5. Bostrom, N., "Are You Living in a Computer Simulation?", *Phil. Q.* 2003; 53(211):243-255
6. Lee, C., "The dark side of light", Ars Technica, 24 August 2012, http://tinyurl.com/c2o25p3
7. Roebke, J., "The Reality Tests", *Seed Magazine*, 4 June 2008, http://tinyurl.com/zp63ga7
8. Schwartz, G.E., PhD, with W.L. Simon, *The Afterlife Experiments*, Atria Books, New York, 2003
9. Alexander E., MD, *Proof of Heaven*, Simon & Schuster, New York, 2012
10. Van Lommel, P., MD, *Consciousness Beyond Life*, HarperOne, New York, 2010
11. Ring, K. and S. Cooper, *Mindsight*, iUniverse, Bloomington, Indiana, 2008, 2nd edition
12. King, L.S., MD, "Cases of the Reincarnation Type, vol 1: Ten Cases in India", *JAMA* 1975 Dec 1; 234(9):978, http://tinyurl.com/hepp99o
13. Radin, D., PhD, *The Conscious Universe*, HarperOne, New York, 1997, p. 88
14. Radin, D., "Entangled Minds" (blog), comment dated 15 November 2010, http://tinyurl.com/j8tvxnl
15. Jaworski, J., *Source: The Inner Path of Knowledge Creation*, Berrett-Koehler, San Francisco, p. 104
16. Campbell, T., *My Big TOE – The Complete Trilogy*, Lightning Strike Books, Huntsville, Alabama, 2007
17. ibid.
18. Elvidge, J., *The Universe – Solved!*, AT Press, Georgetown, Massachusetts, 2008
19. Nowak, M. and K. Sigmund, "A strategy of win–stay, lose–shift that outperforms tit-for-tat in Prisoner's Dilemma game", *Nature* 1993; 364:56-58

Back issues and individual articles available

NEXUS Magazine

Hard copies can be ordered from the website at www.NexusMagazine.com or by contacting your local NEXUS Office.

Individual articles from the magazine may be purchased as downloads via www.NexusMagazine.com for only $1.65 for Australian residents or AUD$1.50 outside Australia. Complete issues also available. Use the search field to find topics of interest or click on the products tab at www.NexusMagazine.com to browse by article, volume or year.

Deadly Psychiatry

Continued from page 36

Doctors should also avoid prescribing drugs at the first encounter unless the situation is very acute. If a patient insists on being prescribed a drug, e.g., an antidepressant, an honest discussion of its many harms and its doubtful benefits should convince most patients that it is not a good idea to rush into action.

The diagnostic labels psychiatrists use fit very poorly with the type of patients that general practitioners meet, but any challenge to specialist perspectives on mental disorders in primary care usually generates incredulity among psychiatrists and a reinforcement of their belief that retraining of primary care workers is the solution.[28] Retraining in what? Not in the DSM, I hope! ∞

About the Author:

Professor Peter C. Gøtzsche graduated with an MSc in biology and chemistry in 1974 and as a physician in 1984. He is a specialist in internal medicine, and worked in the drug industry in 1975–83 and at hospitals in Copenhagen, Denmark, in 1984–95. He helped start the Cochrane Collaboration in 1993 with the founder, Sir Iain Chalmers, and established the Nordic Cochrane Centre in the same year (see http://www.nordic.cochrane.org). He became Professor of Clinical Research Design and Analysis in 2010 at the University of Copenhagen.

Professor Gøtzsche has had more than 70 papers published in the "big five" journals (*BMJ, Lancet, JAMA, Annals of Internal Medicine* and *New England Journal of Medicine*), and his scientific works have been cited over 15,000 times. He has an interest in statistics and research methodology and is a member of several groups publishing guidelines for good reporting of research. He was one of the editors of the Cochrane Methodology Review Group in 1997–2014.

Professor Gøtzsche is the author of several books including *Deadly Psychiatry and Organised Denial* (2015) and *Deadly Medicines and Organised Crime* (2013; see review in NEXUS vol. 21, no. 3).

For more information, visit Professor Gøtzsche's website http://www.deadlymedicines.dk.

Editor's Note:

This article is extracted and edited from the first two chapters of Professor Gøtzsche's book *Deadly Psychiatry and Organised Denial*. Due to space limitations, we're unable to include the accompanying references except in our digital version. Readers can also access them in the Kindle edition of the book, available on Amazon at http://tinyurl.com/jfps6jj.

GEOCLENSE

A simple solution for all electromagnetic radiation in your home.

State of the Art Ionic Resonance Technology designed to balance...
WI FI
Digital TVs
Dirty Electricity
Geopathic Stress
Microwave Emissions
Compact Flourescent Light Bulbs
Emissions from Substations & Towers...

Proven Technology that harmonizes all EMR.
Feel the difference!

Developed and manufactured in Australia by
www.orgoneffectsaustralia.com
Sick Building Syndrome Consultants
Research and Education

ORGONE EFFECTS AUSTRALIA

REMOVE FLUORIDE
WITHOUT KILLING YOUR WATER

STOP the search!

TREAT your family to the ULTIMATE water

ORIGINAL
GRANDER WITH A
FLUORIDE SOLUTION

TECHNOLOGY

Free Call: 1800 675 771
www.grander.com.au

1968 Rarity Republished

Life After Death is Certain

Order from www.NexusMagazine.com

Engineer John Milne developed his own mediumship as a healing practice through the Valley Spiritualist Church, Brisbane, of which he was president from 1963 to 1991. He saw the need for a psychic manual, and published his work in 1968. He died in 1992, but in recent times he made contact with the spiritual circle to ask for his book to be republished.

John Milne discusses the scientific, philosophic and spiritual aspects of survival after death and holds that spiritualism is the science of life, free of dogma and creed and focused on replacing the mystery and fear of dying with a reason and purpose for living. He explains the operations and purposes of spirit guides, helpers and mediumship circles, the nature of psychic gifts, and the various types of mental and physical mediumship. He describes the workings of spirit and distance healing and the seven principles of spiritualism.

His approach is responsible, alerting us to the many pitfalls of psychic work yet also giving inspiration to true spiritual seekers.

Eyesight improvement, naturally.

Pinhole Readers

• Scientifically designed with a multiple of clear holes that allows passage of light rays. Available in unisex tortoise shell colour.

FREE OFFER - ORDER NOW !

Yours **FREE!** The educational **Pocket Guide** to eyesight improvement.

Discover how simple it is to educate yourself to vision improvement with you FREE pocket guide. These vital tips will help people of all ages to relax their eyes, even in the busiest lifestyles.

Order from Nexus Magazine NZ Office, 88C Hansen Rd, RD1, Kerikeri 0294, N.Z. lee@nexusmagazine.com

DEHYDRATORS-NUTCRACKERS-GRAINMILLS-WELLNESS WATER PURIFICATION
SURVIVAL
PRIORITY ONE: PURE WATER FROM A PUDDLE, READY TO DRINK, WITHOUT CARRYING THE WATER AND WEIGHT?
Portable Life Saver Water Bottles/Jerry Cans
LB Healing Products
Ph: 02 6373 3419 or 02 8021 0317
www.grainmills.com.au sales@grainmills.com.au
SOLAR COOKERS-HEALTHY MIRACLE LIQUID SOAP-MIRACLE LAUNDRY BALL-WAGLAN SEALERS-SHOWER FILTERS
ANTIPARASITE TEBBS-MANUAL & ELECTRIC JUICERS-COCONUT OIL-HIMALAYON ROCK SALT LAMPS-DISTILLERS

NEW ZEALAND DVD

"VOICES FROM THE FOREST"

Sacred sites researcher Gary Cook wanted to find out whether the faery folk beings are physical or whether they live in another dimension.

Maori folklore speaks of the 'Turehu' or 'Patupaiarehe: a small faery folk, 3 to 4 foot tall. Often fair haired or occassionally witnessed with red hair and with green or blue eyes and pale skin.

He engaged a camera crew and went into the bush to find out. Never in a million years did he expect to be rewarded so generously when the crew captured a supernatural anomaly on camera.

$29.00 + p&p ($3.50 in NZ, $8.00 in Aust.).
Use coupon on p.96 to order or ph 64 (0)94051963

Books, Films, Mags & Media

GENESIS FOR THE SPACE RACE: The Inner Earth and the Extra Terrestrials'. This book explores UFOs, Atlanteans, Germans living in the Hollow Earth, Round Wing planes, historical evidence of a Nazi secret base in Antarctica, the 1947 flying saucer attack on Admiral Byrd's ill-fated "Operation Highjump" expedition, Extraterrestrials, and the Men from Atlantis. Discover how thousands of Germans, the Third Reich hierarchy, and Hitler escaped to South America in flying disks and giant submarines to their secret Base 221 in Antarctica. Buy now at Amazon.com

'THE ANSWER TO CANCER' A book of considerable depth and probity helps you help yourself. Available: Amazon.co.uk

BIBLE MYSTERIES ABOUT CREATION, Noah, Moses, Jonah, Jesus, explained scientifically by leader of Elohim, Yahweh, in Rael's book INTELLIGENT DESIGN. Download free Ebook at www.rael.org

SAPIENS RISING: The View from 2100, by Neil Freer. Shows how we will live as more enlightened humans, having restored the true knowledge of our history as a genetically created species – part Homo erectus and part Anunnaki / Nefilim. ISBN 978-1585091461, 196 pgs, US $19.95 RRP, use online vendors or www.thebooktree.com

"AT LAST A REAL MESSAGE FROM THE STARS", visit the website www.urigalaxypublications.com

Health Products, Services, Courses

NATURAL HEALTH PRODUCTS. Do you have prostate, heart, arthritis, osteoporosis, heavy metal or digestion problems? I can supply and help with natural health products available at discount prices. Please call 0435 882 083 or email fostymango50@gmail.com for information on health products available.

AFFORDABLE EARTHING SHEETS Sleep earthed, sleep well without EMF. Neutralise inflammation, restore blood circulation. www.earthingnz.com

COLLOIDAL SILVER MAKERS travel model battery powered $140, mains powered model $140. Bob Beck zappers $247, Hulda Clark zappers $167. Enquiries: bw4771@gmail.com, Brian at 02 6624 7702

SPIRITUAL HEALING. Humans / Animals. No fees. www.billlynneharry.co.uk

'OVERCOMING PERIPHERAL NEUROPATHY' booklet detailing exercise, diet & lifestyle choices to reduce pain meds and reclaim your life! $20 incl P&P. To order phn/sms Mick 0475 039 774.

HOMEOPATHIC SINGLE REMEDIES. Australian online store with over 350 remedies available. Free Homeopathic Study Course pdf download. http://www.visnovae.com

ELEMENTAL ANALYSIS AND ELECTRON MICROSCOPE images of metallic samples - http://www.edge-of-science.com/

DNA ACTIVATION: supercharge your "junk" DNA, health and spiritual evolution with Regenetics Method Stage 1: DNA Potentiation. Brendan D Murphy 0481 197 403 / brendandmurphy.net/services.

RADIONIC DEVICES and energy pendulums. Neutralise geopathic stress, balance subtle energy fields. www.emeraldinnovations.co.uk

SOTA INSTRUMENTS: Magnetic Pulser, Silver Pulser, Water Ozonator, Bio Tuner & LightWorks. Enjoy 10% savings on your order when you use this discount code (CA50115) at www.sota.com or call 1 800 224-0242. Worldwide shipping available.

Land, Businesses, for Sale or Rent

WWW.SURVIVALSTOREHOUSE.COM Australian distributor of Mainstay emergency food & water. *5 year shelf life*. In fair weather, prepare for foul.

Science & Technology

FOR UFO TECHNOLOGY Consult AGSPRI www.agspri.com.au
SCIENCE BREAKTHROUGH, RESEARCH REPORT: Electricity and Gravity, Tornadoes, www.smashwords.com/books/view/579120.

Miscellaneous

MAITREYA'S EMERGENCE www.share-international.org.au info@shareinternational.org.au M: 0428592209
THE VALLEY SPIRITUALIST CHURCH Services 2nd & 4th Sundays 10.30am. 17 Cleveland St, Stones Corner, Brisbane. Enq: (07) 3849 6450.

UFO's and the Unexplained

MEET UFO FOLK AT: intelligence.atspace.com
UFO Research Queensland Monthly meetings, nightwatches, conferences. (07) 3376 1780.
UFO RESEARCH NSW INC, Monthly meetings, sky watches, Contactee support. www.ufor.asn.au. 02 9144 7677 or 0422 898 398
WE WOULD LIKE to inform readers about our work in preserving the social history of UFOs covering the early 20th Century to current dates. Please see www.hauntedskies.co.uk for further details. John Hanson, retired police UK, and Dawn Holloway.
UFO HOTLINE: 1800 77 22 88
QLD UFO NETWORK (MUFON) 2nd Friday each month 7.30pm, Community Centre, 183 Lillian Ave., Salisbury. Enq: (07) 3849 6450

Personal Growth

ASCENDED MASTER TEACHINGS - your questions answered. Reincarnation, karma, the soul, healing, abortion, relationships and more. Online bookstore / CDs / DVDs / conferences / courses / radio. www.SummitLighthouse.org
MIDWEST RESEARCH'S SCWL HI TECH SUBLIMINAL CD's for effective subconscious behavioural change in over 12 areas. Change your thinking, change your life! For current list of 180 SCWL subliminal titles please visit our wonderful new informational website at scwl.org for fully explanatory videos and sound samples and then / or if you prefer simply ring David, for quick suggestions for your situation on 02 8214 8397 or 0419 605 365. Special offers to Nexus readers available. 90 day money back guarantee on results! Est. in Australia since 1984.
SPIRITUAL ART WEBSITE www.abnerlamunda.co.uk
MAITREYA – WORLD TEACHER Facebook page: Bill Sohan. gurdjieff@hotmail.co.uk
IBOGA TREATMENT in Vanuatu. Contact earthangel.2@bigpond.com
VEDIC-WESTERN FUSION ASTROLOGER for consultations, workshops & talks. http://macro-astrology.com/author/

Local Discussion Groups

MORNINGTON PENINSULAR NEXUS DISCUSSION GROUP. Vic. Contact Faye 0458 141 071 for details.
BRISBANE DISCUSSION GROUP. Phone Rita (07) 3352 6141 for details.
S.A. DISCUSSION GROUP. Phone Peter, (08) 8391 1640
THE VALLEY SPIRITUALIST CHURCH Services 2nd & 4th Sundays 10.30am. Enq: (07) 3849 6450.
FNQ MAREEBA DISCUSSION GROUP Ph: Paul 0427 113 369
BRISBANE DISCUSSION GROUP. Phone Rita (07) 3352 6141 for details.
ADVERTISE HERE FOR JUST 99c per word: editor@nexusmagazine.com

Water Ozonator

Ozone is nature's purifier.

Designed to freshly ozonate a glass of drinking water. Enjoy the fresh taste and benefits of added oxygen.

Phone: NTP Health Products 02 4997 2530
Email: marketing@ntphealthproducts.com
www.ntphealthproducts.com

H_2O_2
Hydrogen Peroxide
35% Food Grade for Farm and Garden

SPECIAL PRICE:
25 litre drum $242.00 (Incl GST) PLUS freight
500ml bottle $33.00 (Incl GST) PLUS freight

Phone: Barrington River Organic Farm 02 4997 2530
Email: mail@barringtonriverorganicfarm.com.au

The Bion Ring

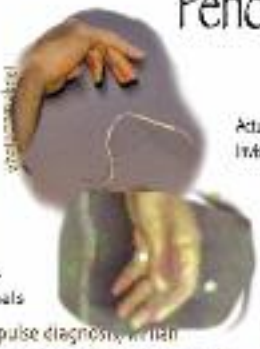
Electro-magnetic Protection

Bion ring design voted most potent human energy assist by one of Europe's leading health/consciousness magazines

THE BION RING: REDUCED STRESS, RAPID HEALING, EMOTIONAL BALANCE, ENHANCED MIND FUNCTION AND JOY OF LIFE!

-The Bion Ring, based on the design of an ancient ring discovered in the Valley of the Kings in Egypt in 1860
-thought to have originated in Atlantis
-utilizes geometric forms placed and balanced to a lost system of ancient knowledge.
-The Bion Ring tunes the wearer's subtle energy fields creating a powerful barrier against electro-magnetic, psychic and other stressors

-a copy of the original ring was worn by Howard Carter during his excavations of King Tut's tomb



recommended by health professionals

Kinesiology, EAV, pulse diagnosis, infrared and now new remarkable daylight photography confirm the Bion technologies to be potent bio-resonance tools promoting rapid healing, and consciousness activation/protection

The Bion Pendant

The Bion pendant provides additional protection and can be worn on its own or with the Bion ring for maximum effect, as well as for amplifying the properties of healing gems set within it.

Actual unretouched photo showing invisible to the eye Bion geometries

LIFE FORCE SUBTLE ENERGY TECHNOLOGIES
Bion ring in pure silver: $175
Bion pendent(22ct gold/pure silver): $350
Please add $10 shipping per order.
Please send money order to: Life Force S.E.T
Box 916, Byron Bay, NSW, 2481, Australia
Or order online with credit card from:
www.visionutopian.com.au
ph. 0412-337421 email:mark@lis.net.au

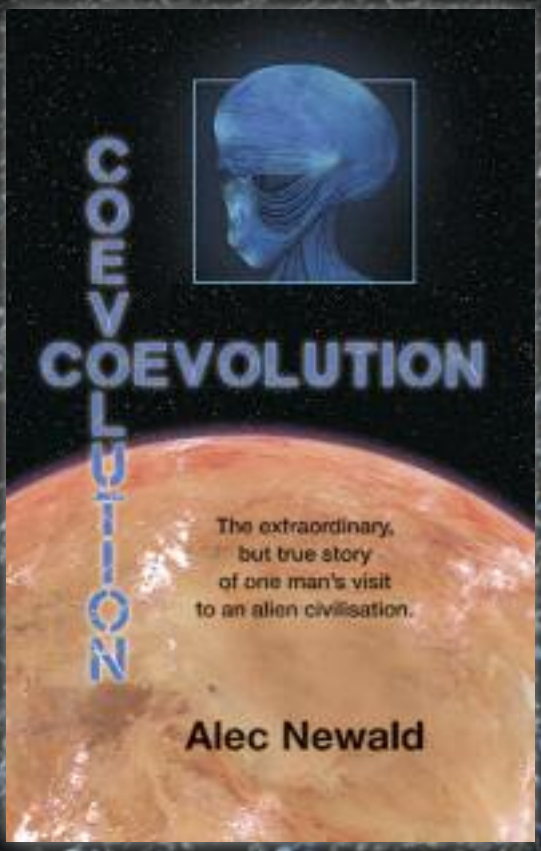
NEXUS BOOK SPECIAL

In late February 1989, Alec Newald arrived in Auckland after what should have been a three-hour drive from Rotorua in New Zealand. Soon he realised he had lost ten days but had no idea how that could have happened.

Through a series of revelatory dreams and later, hypnotherapy sessions, Alec was able to piece together the puzzle.

AUD$20 (plus p&p)

To order, visit www.NexusMagazine.com



CONSCIOUS SOLUTIONS TO THE INSANITY OF EMPIRE

- Free GFM Media archive
- Solution-based activism
- REAL journalism
- DNA activation
- Suppressed truth
- 'The Portal' is coming

JOIN CO-FOUNDERS BRENDAN D. MURPHY AND AIMEE DEVLIN AT:

GLOBALFREEDOMMOVEMENT.ORG

Queensland Koala Crusaders Inc.

Add Your Voice Today..

The wild koala is under severe pressure and local populations are crashing at an ever increasing and alarming rate.

Please join with us as we work with a variety of local groups and governments to save our iconic animal– and the thousand other native species that live under their trees with them

When future generations ask who changed their future – the answer will be us (one way or another)

www.koalacrusaders.org.au
www.facebook.com/QldKoalaCrusaders

DOOMED

Unless we take action now

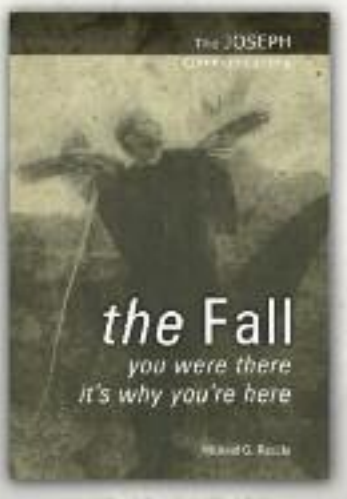
A SPECIAL NOOSA TODAY REPORT

The JOSEPH Communications

Aeons ago *everything* changed...

AND YOU WERE THERE!

...THERE'S MUCH MORE TO YOU THAN YOU IMAGINE.



AUD $36 / NZ $38
(inc. p&p)

You have forgotten the cataclysm that created today's dysfunctional societies and wounded planet... In *the Fall*, Joseph, highly respected spirit communicator, seeks to reactivate that astonishing inner knowledge of your spiritual origins. Each chapter is a eureka moment and, by the last page, many, if not *all*, of those elusive answers regarding existence and the great mysteries will be elusive no longer. From the Big Bang to your essential role in creation... if you seek meaning to life in general, and your life in particular, you *absolutely, definitely* should read *the Fall*. ...Your views of spirituality, science, and reality are about to change forever.

'The Fall is the most important spiritual book ever written.' **Jean Whittle.**

'Here are the answers to life's impossible contradictions, and what we can do for ourselves and others - brilliant!' **Jan (Amazon review)**

Also available in ***The Joseph Communications*** *series:*

REVELATION:
who you are, why you're here AUD $35/NZ $37 (inc. p&p)

ILLUMINATION:
change yourself, change the world AUD $32/NZ $34 (inc. p&p)

YOUR LIFE AFTER DEATH:
the definitive guide to the afterlife AUD $36/NZ $38 (inc. p&p)

TRANCE MISSION:
enlightening, informing–Joseph in public AUD $48/NZ $51 (inc. p&p)

FROM HERE TO INFINITY:
new perspectives on your life and world AUD $36/NZ $38 (inc. p&p)

All books available from:

www.josephspeaks.com or Nexus NZ

eBook versions available from

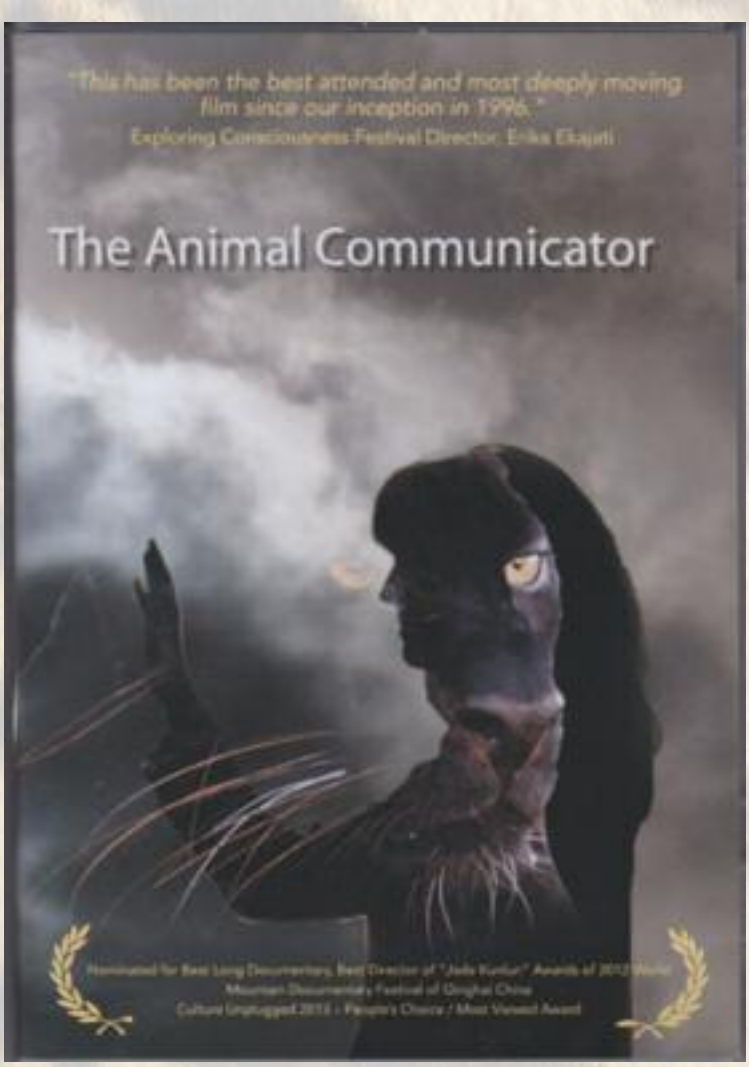
amazon.com BARNES&NOBLE

The Animal Communicator DVD

What if you could talk to animals and have them talk back to you?

Anna Breytenbach has dedicated her life to what she calls interspecies communication. She sends detailed messages to animals through pictures and thoughts. She then receives messages of remarkable clarity back from the animals.

AUD$30
+ postage & handling



Anna can feel the scars hidden under a monkey's fur. She can understand the detailed story that is causing a bird's trauma. She transforms a snarling leopard into a relaxed, contented cat.

The whole animal kingdom comes alive in a way never seen before: wild birds land on her shoulders, fish gather around her when she swims, and wild, unfamiliar baboons lie on her body as if she is one of their own.

This is the first full-length film on the art of animal communication.

You must watch this documentary!

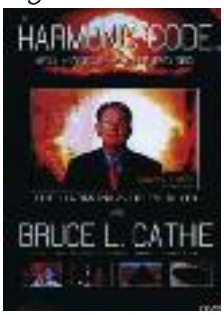
Order at www.NexusMagazine.com

DVDs available through NEXUS. Request our full book catalogue by writing to us at PO Box 307, Maleny, QLD 4552, phone (07) 5442 9280 or visit www.nexusmagazine.com

164 Editions of NEXUS on ONE DVD!! NEXUS MAGAZINE 1987-2016

This DVD contains the complete back issues of NEXUS from 1987-2016 in pdf format.
Code NEXDVD16 $149

The Harmonic Code by Bruce Cathie

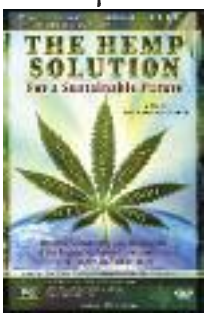


"UFOs, Antigravity and the Energy Grid". Matter, antimatter, time travel, harmonic mathematics, etc.
Code HARC $33

Vaccination: The Hidden Truth

Their ineffectiveness, the manipulated statistics and what vaccines contain exposed in this DVD.
Code VDVD $33

The Hemp Solution



Award-winning documentary into hemp industries, medicinal uses and controversies.
Code THS $33

NEXUS Conference DVDs - 2014

Joe McMoneagle, John Lear; Simon Parkes; Michael Tellinger; Gary Opit and more. Each DVD $35; Highlights $45; Set $350

Recreating A Garden Planet

Psychology of Humanity-Earth Co-evolution. Presented by Leonid Sharashkin.
Code RCAGP $25

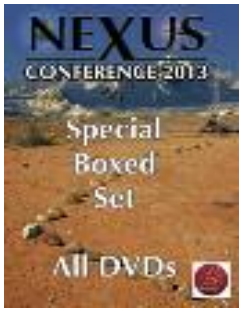
The Eternal Cycle

Fertility and Birth in Nature and Human Experience. Presented by Leonid Sharashkin.
Code TEC $25

The Return of Anastasia

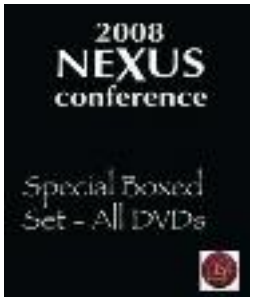
Leo Sharashkin explains the significance of the Russian *dacha* gardening movement.
Code TROA $25

NEXUS Conference DVDs - 2013



Steven Greer, Dannion Brinkley, Duncan Roads, Dr Don Maisch, Gordon Duff and more. Each DVD $35; Highlights $45; Set $350

NEXUS Conference DVDs - 2008

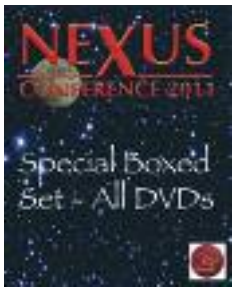


Ringing Cedars, Crystal Skull, Harry Oldfield, Callum Coats, Gary Opit and more. Each DVD $35; Highlights $45; Set $350

NEXUS Conference DVDs - 2010

Jim Marrs, Klaus Dona, Donna Fisher, Kathy Forti, Nassim Haramein & more. Each DVD $35; Highlights $45; Set $350

NEXUS Conference DVDs - 2011

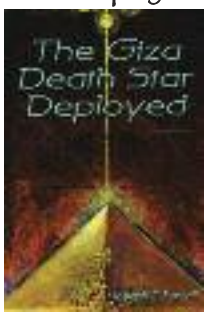


Linda Moulton Howe, Alec Newald, David Stetzer, Dr Carol Rosin & more. Each DVD $35; Highlights $45; Set $350

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com. For New Zealand see page 96 or phone 09 405 1963

Books available via NEXUS on Ancient Mysteries and Travel Archaeology/Mysteries

The Giza Death Star Deployed



The sequel to Joseph Farrell's *Giza Death Star* on the secrets of the Great Pyramid of Giza.
Code GDSD $33

Yetis Sasquatch & Hairy Giants

David Hatcher Childress's fantastic journey across the Himalayas to Europe and North America.
Code YETIS $39

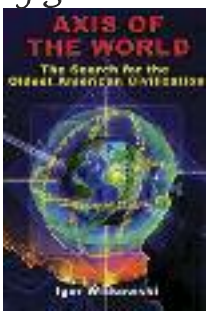
Sunken Realms by Karen Mutton

A Survey of Underwater Ruins From Around the World. Includes discussion on causes of sunken cities.
Code SUNR $39

Lost Cities & Ancient Mysteries of the Southwest

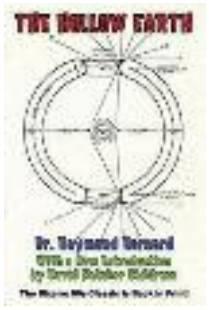
David Hatcher Childress traverses the American Southwest investigating archaeological mysteries.
Code LCSW $38

Axis of the World by Igor Witkowski



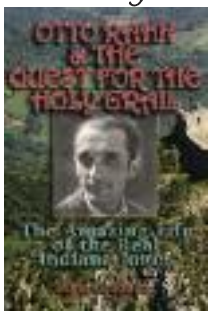
A multidisciplinary approach across the Americas in search of the oldest civilisation.
Code AOTW $38

The Hollow Earth



Dr Raymond Bernard's bizarre 60's classic is back in print! New intro by David Hatcher Childress.
Code THE $37

Otto Rahn & the Quest for the Holy Grail



The Amazing Life of the Real "Indiana Jones" and his 1930s adventures, by Nigel Graddon
Code OTTO $36

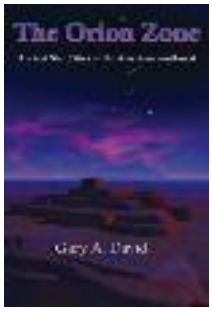
In Secret Tibet by Theodore Illion

Reprint of a rare 1930s travel book by a German traveller who travelled through forbidden Tibet.
Code IST $33

Danger My Ally

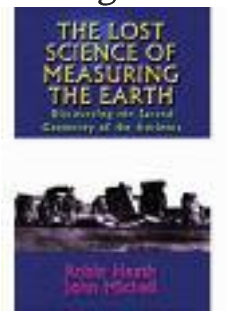
The true life adventure of F.A. Mitchell-Hedges including his discovery of the famous Crystal Skull.
Code DMA $33

The Orion Zone



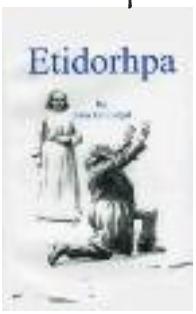
Ancient Star Cities of the American Southwest and ancient starlore, by Gary A. David.
Code TOZ $38

The Lost Science of Measuring the Earth



Discovering the Sacred Geometry of the Ancient's by Robin Heath and John Michell.
Code LSME $33

Etidorhpa

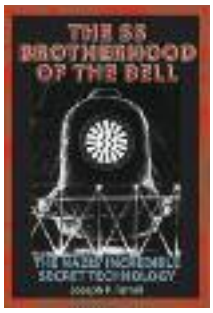


Fantasy or truth? Rare book on Hollow Earth adventures first published in 1896, by John Uri Lloyd.
Code ETI $55

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com.
For New Zealand see page 96 or phone 09 405 1963

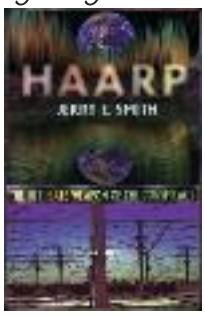
Conspiracy & Religious Revisionism/Mysteries available via NEXUS (selection only)

The SS Brotherhood of the Bell



The Nazis' Incredible Secret Technology and secret weapons project, by Joseph P. Farrell.
Code BOTB $38

HAARP: The Ultimate Weapon of the Conspiracy by Jerry E. Smith



The HAARP project in Alaska is one of the most controversial projects ever undertaken by the US Government.
Code HTUW $34

ParaPolitics: Conspiracy in Contemporary America

Collection of Kenn Thomas' lecture remarks, interviews and articles from the world's underground press.
Code PARA $38

Liquid Conspiracy: JFK, LSD, the CIA, Area 51 & UFOs

Underground author George Piccard on the politics of LSD, mind control, JFK's LSD experience and more.
Code LICON $33

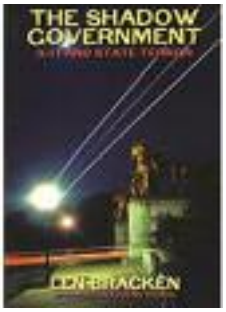
The Secret Vault by André Douzet and Philip Coppens

The secret societies' manipulation of Sauniere & the secret sanctuary of Notre-Dame de Marceille.
Code TSV $35

Mind Control, World Control by Jim Keith

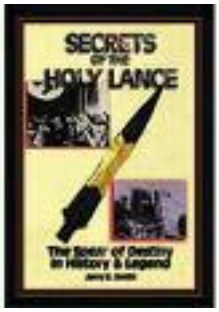
Veteran conspiracy researcher's overview of mind control as a tool of the New World Order.
Code MCWC $33

The Shadow Government



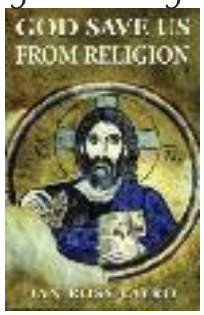
9-11 and State Terror, by Len Bracken, with introduction by Kenn Thomas.
Code TSG $33

Secrets of the Holy Lance



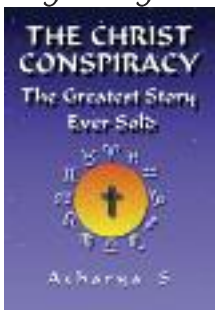
The Spear of Destiny in History & Legend by Jerry E. Smith and George Piccard.
Code SOHL $37

God Save us from Religion by Ian Ross Vayro



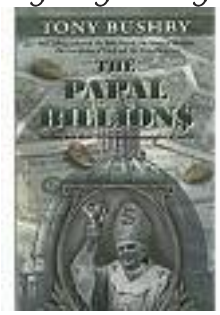
Examination of the Bible, Sumerian tablets & early Egyptian records in a vigilant search for the truth.
Code GSFR $38.50

The Christ Conspiracy by Acharya S



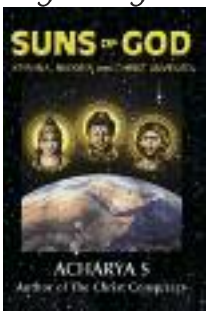
Christianity and the story of Jesus Christ created by members of secret societies, mystery schools & religions.
Code TCC $37

The Papal Billions by Tony Bushby



Damning facts about the Vatican's accumulation of wealth over the centuries.
Code TPB $37

Sons of God by Acharya S



Fascinating and original research-based evidence on Krishna, Buddha and Christ.
Code SOG $37

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com.
For New Zealand see page 96 or phone 09 405 1963

Books available through NEXUS—Environment/Spirituality and Alternative

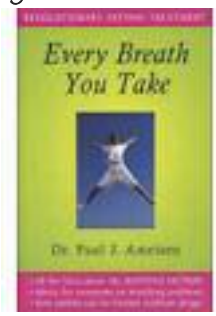
Raising a Vaccine Free Child by Wendy Lydall

Guide to the facts, myths, problems and solutions associated with raising a vaccine free child.
Code RVFC $38

Light That Heals by Donna Fisher

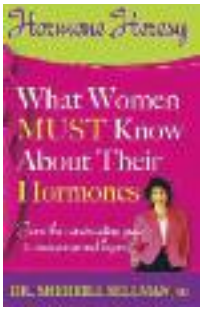
Restates and updates information from her earlier works on dirty electricity, EMFs and microwaves.
Code LTH $35

Every Breath You Take by Dr Paul Ameisen



Help for asthma sufferers with information on the Buteyko Method breathing techniques.
Code EBYT $33

Hormone Heresy by Sherrill Sellman, ND



What women MUST know about their hormones. Updated edition contains 100 more pages.
Code HOH $35

Behavioural Problems in Childhood

Neurological & behavioural disorders and the link to vaccines by Viera Scheibner, PhD.
Code BPIC $30

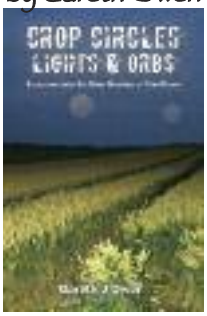
Healthy Home, Healthy Family by Nicole Bijlsma

Find out about possible toxin sources in the home: how to identify, investigate and overcome them.
Code HHHF $33

Fluoride Fatigue by Bruce Spittle

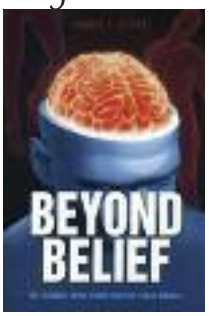
Fluoride Poisoning: is fluoride in your drinking water and from other sources making you sick?
Code FLFA $15

Crop Circles, Lights and Orbs by Gareth Owen



Braving the rain, wind and cold of British summers, this is an excursion into the Other Realities of Thin Places.
Code CCLO $29

Beyond Belief



The Ultimate Mind-Power Instructional Manual, by James F. Coyle.
Code BEYB $55

Walk With Me by Nerida Oberg

Moving account of a Sydney psychotherapist's messages from her daughter after her death.
Code WWM $15

As Reality Dissolves by Gareth Owen

Author of *Crop Circles, Lights and Orbs* ventures further to reveal the Infinite (aka God) Field
Code ARD $29

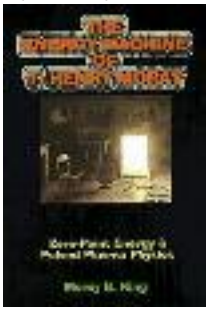
Colloidal Siver by Keith Courtenay

The Hidden Truths: Information on colloidal silver's proven efficacy in medical practice.
Code COLS $40

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com.
For New Zealand see page 96 or phone 09 405 1963

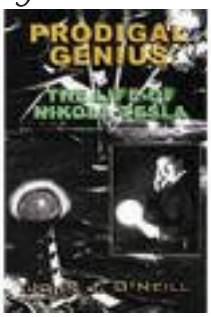
Environment/Spirituality/Suppressed Science & Free Energy

The Energy Machine of T. Henry Moray by Moray B. King



Zero-Point Energy & Pulsed Plasma Physics. 1920s energy device explained by modern science.
Code MORAY $37

Prodigal Genius by John J. O'Neill



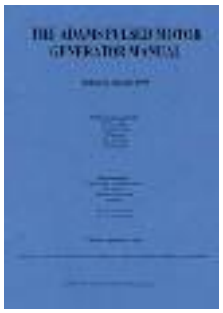
Nikola Tesla is revealed as a figure of genius whose influence on the world reaches into the far future.
Code PROD $35

The Fantastic Inventions of Nikola Tesla Compiled by Childress

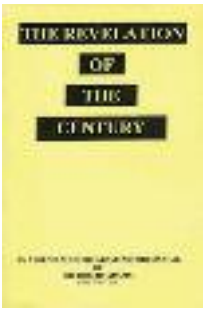
Compendium of the inventions of the originator of electrification. Includes patents, diagrams, photos.
Code FINT $37

Harnessing the Wheelwork of Nature ed Thomas Valone

Essays, papers, technical briefings and press clippings dedicated to Tesla's work and memory.
Code HTWN $37

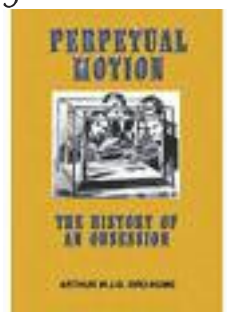
Adams' Pulsed Electric Motor Generator Manual

This is the manual which further describes the details on how to build the Robert Adams motor.
Code APEM $44

The Adams Manual - Addendum



This addendum further updates the research and theory surrounding the Adams' Motor.
Code AMA $35

Perpetual Motion by Arthur Ord-Hume

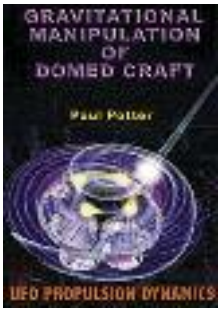


A present-day engineer finds perpetual motion seekers were important in engineering's history.
Code PERP $38

The Free-Energy Device Handbook

A compilation of patents, diagrams, descriptions and reports, edited by David Hatcher Childress.
Code FEDH $37

Gravitational Manipulation of Domed Craft

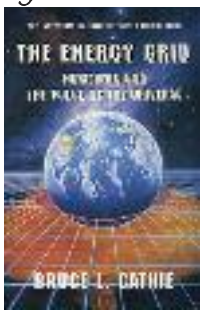


UFO Propulsion Dynamics by Paul Potter. Research based on crashed UFOs from Russia and America.
Code GMDC $44

The Anti-Gravity Handbook

Edited by David Hatcher Childress. Free Energy, Flying Saucer Propulsion, UFOs, NASA Cover-ups.
Code TAGH $35

The Energy Grid by Bruce Cathie



Breakthrough book that explores the incredible potential of the Energy Grid and Earth's Unified Field.
Code TEG $35

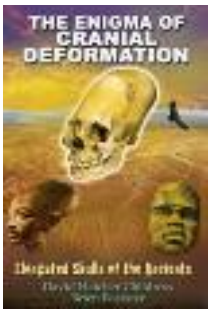
The Tesla Papers by David H. Childress

Tesla's vision of the future, including wireless power, anti-gravity, free energy & advanced solar power.
Code TTP $37

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com.
For New Zealand see page 96 or phone 09 405 1963

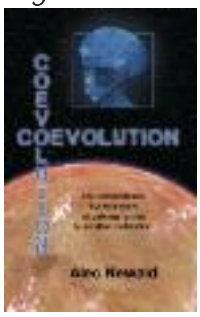
A selection of books on UFOs and the Unexplained available through NEXUS.

THE ENIGMA OF CRANIAL DEFORMATION



The puzzle of elongated skulls of the ancients by David Hatcher Childress and Brian Foerster.
Code EOCD $35

COEVOLUTION (2011 edition) by Alec Newald

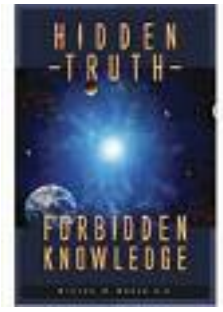


The life-changing true story of a man taken for ten days to an extraterestrial civilisation.
Code COEV $22

The Star Child Skull by Lloyd Pye

Genetic Enigma or Human-Alien Hybrid? (hardcover edition).
Code TSS $55

HIDDEN TRUTH: Forbidden Knowledge by Steven M Greer

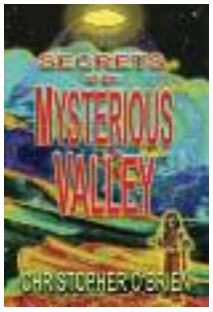


From UFO sightings to meetings with CIA directors, join Greer on his discovery of secret agendas.
Code HTFK $44

THE ART OF CLOSE ENCOUNTERS

Kim Carlsberg's stunning illustrative collection of UFO encounters includes fascinating descriptions.
Code ACE $55

SECRETS OF THE MYSTERIOUS VALLEY

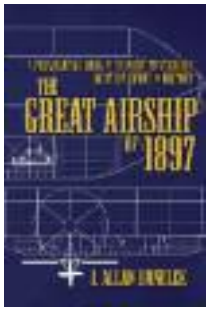


No other region in North America features such unusual phenomena found in the San Luis Valley by Christopher O'Brien.
Code SOMV $38.50

REICH OF THE BLACK SUN

Nazi Secret Weapons & The Cold War Allied Legend by historian and physicist Joseph P. Farrell
Code ROTBS $37

THE GREAT AIRSHIP OF 1897

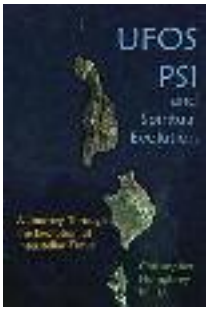


A Provocative look at the Most Mysterious Aviation Event in History by J. Allan Danelek.
Code AIRS $39

UFOS AND ANTI-GRAVITY Piece for a Jigsaw

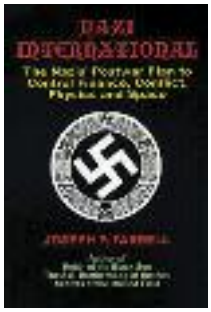
Scientist Leonard G. Cramp's 1966 classic on flying saucer propulsion & suppressed technology.
Code UFAG $33

UFOS, PSI & SPIRITUAL EVOLUTION



A Journey Through the Evolution of Interstellar Travel by Christopher Humphrey PhD.
Code UFOPSI $33

NAZI INTERNATIONAL



The Nazi's Postwar Plan to Control Finance, Conflict, Physics and Space by Joseph P. Farrell.
Code NAZI $38

THE LUCID VIEW

Investigations into Occultism, Ufology and Paranoid Awareness by Aeolus Kephas.
Code LUCID $35

To order use the coupon on p. 96, phone (07) 5442 9280 or visit www.nexusmagazine.com.
For New Zealand see page 96 or phone 09 405 1963

ADVERTISING RATES 2017 (prices include GST)

DESCRIPTION	SIZE (ht x width)	AUST/NZ EDN.	USA EDN.	UK EDN.	DIGITAL
FULL PAGE (B&W)	240mm x 180mm	$990	US$750	£600	$500
2/3 page vertical 2/3 page horizontal	240mm x 115mm 160mm x 180mm	$770 $770	US$600 US$600	£450 £450	$400 $400
1/2 page vertical 1/2 page horizontal	240mm x 87mm 120mm x 180mm	$550 $550	US$425 US$425	£330 £330	$350 $350
1/3 page vertical 1/3 page horizontal	240mm x 58mm 80mm x 180mm	$385 $385	US$275 US$275	£240 £240	$250 $250
1/4 page vertical 1/4 page horizontal	120mm x 87mm 60mm x 180mm	$330 $330	US$250 US$250	£180 £180	$190 $190
1/6 page vertical 1/6 page horizontal	120mm x 58mm 80mm x 88mm	$220 $220	US$200 US$200	£150 £150	$150 $150
1/8 page (Bus.Card)	60mm x 88mm	$198	US$150	£120	$125
1/9 page (standard)	80mm x 58mm	$165	US$125	£105	$100
Display Box (vert.) Display Box (horiz.)	80mm x 44mm 60mm x 58mm	$132 $132	US$100 US$100	£ 90 £ 90	$ 85 $ 85
De-Classifieds		99c p/word	$1 p/word	45p p/word	$1 p/word
Outside Back Cover Inside Front Cover Inside Back Cover		$2,750 $2,200 $2,200	US$1,300 US$1,100 US$1,100	£1,200 £950 £950	$1,200 $1,000 $1,000
Inserts		POA	POA	POA	N/A

THINGS YOU SHOULD KNOW:

1) Each international edition of NEXUS is identical, except for the advertising.
2) Payment MUST accompany finished artwork. Artwork should be emailed as an attached pdf file.
3) Discounts do exist for multiple issues - but *ONLY* if pre-paid.

ADVERTISING SCHEDULE 2017

Issue #	On-sale period	Booking deadline	Artwork deadline
Vol. 24 #01	Dec 16–Jan 2017	30th Oct 2016	7th Nov 2016
Vol. 24 #02	Feb-Mar 2017	30th Dec 2016	7th Jan 2017
Vol. 24 #03	Apr-May 2017	30th Feb 2017	7th Mar 2017
Vol. 24 #04	June-July 2017	30th Apr 2017	7th May 2017
Vol. 24 #05	Aug-Sept 2017	30th Jun 2017	7th July 2017
Vol. 24 #06	Oct-Nov 2017	30th Aug 2017	7th Sep 2017

AUSTRALASIAN EDITION

Readership: 65,000
Distribution: Australia, New Zealand, S.E. Asia and Pacific Islands, + misc international

Aust. Contact: Duncan Roads, NEXUS Magazine
PO Box 307, Maleny Qld 4552, Australia
Tel: (07) 5442 9280
Email: editor@nexusmagazine.com

NZ. Contact: Lee Brogan, NEXUS Magazine
88C Hansen Road, RD 1, Kerikeri 0294, New Zealand
Tel: 64 (0)9 405 1963
Email: lee@nexusmagazine.com

UK/EUROPE EDITION

Readership: 75,000
Distribution: UK + Europe + misc international
Contact: Alex Allen, NEXUS Magazine (UK)
55 Queens Rd, E. Grinstead, W. Sussex, RH19 1BG, UK
Tel: 44 1342 322854; Fax: 44 1342 324574
Email: nexus@ukoffice.u-net.com

USA/CANADA EDITION

Readership: Relaunched with 20,000+ readers
Contact: Duncan Roads, NEXUS Magazine
PO Box 307, Maleny Qld 4552, Australia
Tel: 617 5442 9280 Email: editor@nexusmagazine.com

Is it Time to Renew Your Health or Finances?

Take

Elixir of Life

by Denis of Oz Daily

Ormus Superfood by Denis of Oz uplifts you into states of Happiness, Love, Richness, Spiritual Evolution, Consciousness, Wellness for pets, as well as brings agricultural productivity. ***Mighty Companions join our Ormus making sessions.*** →

See the rich vibrational field above our Ormus!

"Ormus is the Bridge between matter and Spirit" - Barry Carter

"Denis of Oz is the BEST at imprinting his Ormus. Denis is meticulous at producing his Ormus to the highest vibrational standard possible. You needn't look any further."

- Sharon, California.

A Vibrational Assist Empowering The Manifestation Of Your Dreams

The ORMUS of Unreasonable Happiness

Choose between our extensive range of higher consciousness imprinted Ormus batches including:

1. Self Regeneration for the healing and release of old patterns and obstacles;
2. Mother of Abundance for increased richness, rewards, supply and inflow;
3. The Ideal Soul Mate for union of the ideal partners with increased love;
4. The Bonus Pack for self regeneration, healing and abundance;
5. Soul Family Pack for family harmony, resonance, soulful connection, community and family healing;
6. Soul Intuitive Pack for the RECOVERY of your 'Intuitive Knowings', ClairVoyance, ClairAudience, and ClairSentience;
7. Soul Destiny Pack is designed to accelerate your Life Mission manifestation.
8. The Soul Mystic Pack is our most sublime tool for Soul Evolution.

"Plants, Crops & Animals LOVE Ormus too!" (Pets Thrive & Heal)

ORMUS Innovation.. .....NOT Imitation.

Call for more information on discounted packs & FREE bonuses.

Latest Testimonials...

More Winnings with Mother of Abundance! - Hi Denis, I'd like to thank you for quickly changing my life and luck..
I received the Mother of Abundance Ormus in the afternoon and took a few drops and had a wonderful enriching dream that night that felt SO REAL about me going to my local club and winning a jackpot on a poker machine. Far out, it Felt so Real!
The next day when walking past the club I had a gut feeling to walk inside and play. YEP .. quick enough, I WON the JACKPOT!
Well, the luck didn't end there, for I was on a winning streak! Two days later I had many, many customers buying LOTS of stock in my store .. which has been quiet for months. Well another two days later a friend of mine asked me if I wanted to place a bet on a greyhound, (which I don't normally do) but the number 5 came into my mind and sure enough, the greyhound won!
My friend could not believe that I'd won another $400 as I raved about the MA Ormus. Great stuff Denis
I am definitely telling people about it now… I'm ordering the 'Soul Mate' Ormus next .. like tomorrow.
- Mike V Sutherland NSW

My Blood Sugar is like an 18 year old! - I have just come from the doctor who can not believe my blood test results. He says he had to check with lab (twice) to be sure they were my results - a blood sugar level like an 18 yr old - I am 65 last September 2013. I had Self Regeneration to start with and now the 'Mother of Abundance' is my present product. Thank you Denis.
- Lester M JP Moree NSW

Your MA Ormus really does the job - With the first bottle of MA, I saw gold sparks, then money started coming from little wins and then some bigger ones. The dreamtime bottle really amps the dreams up, I dont wanna wake up; - Your Ormus really does the job. Cool to have found your stuff. *- Kim McNab Parnell NZ*

Bonus & Family Pack Only

Special NEXUS Offer: Mention 'Nexus' with orders over $95 & receive a 10% Discount!

Ordering Ormus is ordering a powerful vibrational input .. So research and **KNOW your Alchemist** .. for their 'Vibration' will be IN your Ormus.
Credit/Debit card, Paypal or Bank Deposit OK OR, Postal Money Orders to: **Denis Cooney 1/52b Currumbin Creek Rd Currumbin 4223 Qld Oz**
A **FREE 8 page booklet**, Full Instructions, Great Ormus reading and Ormus Reports come with orders. **Call NOW for 'Special Summer Offer'**

MasterCard VISA

Visit: Ormus-Alchemy.com or 04 3323 8888